The Annual Oration,

ON

FERTILIZATION IN RELATION TO PATHOLOGY,

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BY

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NOTHING which came under my observation in childhood left a deeper impression on my mind than the realization of the fact that the tadpoles, which swarmed in the ditch bordering my playground, came from the frog's spawn so conspicuous in that ditch in the early days of spring. Many events, apart from watching the conversion of the aquatic tadpole into the amphibious frog, quickened my interest in the phenomenon of reproduction, including the development of worms, moths, fishes, reptiles, birds, and mammals, and the whole subject has retained for me a peculiar fascination. It is scarcely appreciated by men to-day that the human ovum was not discovered until 1827; this discovery (one of the greatest man ever made about himself) we owe to von Baer. So far as man is concerned, the fundamental facts relating to the fertilization of the ovum are matters of inference, for no one has witnessed the union of a spermatozoon with a human ovum. Our knowledge of the development of spermatozoa (spermatogenesis) is founded, so far as mammals are concerned, mainly on observations made on the testes of rats. We know less of the development of the sperm than of ova, but no one denies that a new human being is the result of contact of an active mobile spermatozoon (microgamete) with a passive yolk-laden ovum (macrogamete). After these dissimilar gametes have met, the resulting body, known as the oösperm or zygote, begins to segment, and under favourable conditions produces an embryo.

It is worth bearing in mind that a spermatozoon is the most easily identified of all varieties of the epithelial cell, whereas the virgin human ovum has no specific characters; it is usually recognized by its situation in the reproductive tissues. Some years ago, as a matter of routine, I slit up many Fallopian tubes, removed in the operations of hysterectomy and ovariotomy, and scrutinized their contents with a microscope in the hope of detecting ova in them. I satisfied myself that the old idea of the regular shedding of a ripe ovum once a month by healthy women had no foundation in fact; ova are shed frequently, and it is probable that the Fallopian tubes of a mature woman are rarely without a ripe ovum. On one occasion, after removing a uterus containing fibroids, one of which obstructed the uterine end of a Fallopian tube, I found a recess in the tube lined with mucous membrane containing a number of cells, any one of which would pass for a ripe ovum. The difficulty of distinguishing a free ovum applied in this instance with great force. I do not know an absolute test.

Gametic Attraction.

Every thoughtful man must have asked himself the question, What is the power which leads a spermatozoon to an ovum? The usual description of fertilization leaves an impression on the mind that when environment is favourable, and the genital passages of the female contain spermatozoa, a meeting between an ovum and a spermatozoon is a casual affair. This is far from being the case: ova and spermatozoa are powerfully attracted to each other within short distances by some force of which we know very little, and which we may conveniently call *gametic attraction*. Observers who have studied the fertilization of eggs laid in water notice that when a mature ovum is brought into the vicinity of sperm, the spermatozoa are influenced by its presence to direct themselves towards it, and make energetic swimming efforts to reach it.

Gemmill in his description (1912) of the development of the starfish, *Solaster endeca*, describes the process of spawning. A female and a ripe male were in a tank, and whilst the female starfish was shedding ova, the male, resting near the side of the tank about 2 ft. distant, sent out thin streams of sperm. Although the eggs are much too large and opaque to allow the process of fertilization to be watched under the microscope, it could be readily seen that they attract the sperm strongly as soon as they are shed.

Botanists tell us that the spermatozoids of ferns are capable of spontaneous movements through water, and there is some influence in the neighbourhood of the egg cell which attracts these mobile spermatozoids. In the mature archegonium of mosses some of the cells in the canal leading to the egg cell yield cane sugar which, diffused in the water, exerts an attractive stimulus on the spermatozoids. It is probable that the movements by which spermatozoids approach the female organs are chemotactic. The following simple experiment, which I owe to Mr. J. B. Bergheim, is of the same class:

Take a full-blown flower of the beautiful orchid *Odontoglossum grande*, and with a pointed stick or pencil extract its pollinia in the manner described by Darwin. The pedicel carrying the pollinia sticks so firmly to the pencil by means of its adhesive disc that in half a minute it is

Fig. 1.—The pollinia and pedicel of the orchid, *Odontoglossum grande*. Immediately after extraction, and after the "act of depression."

difficult to detach it without damage, but if the pollinia, immediately after the act of depression, be brought in contact with the viscid stigmatic surface of another ripe flower of the same species, they instantly adhere and leave the stick without damage—indeed, in some instances the pollinia and the pedicel supporting them leave the pencil with alacrity. If the adhesive matter is allowed to harden firmly, then, when the pollinia are presented to the stigmatic surface, they become detached from the pedicel, which remains fixed to the stick.

The changes which follow the pollination of the odontoglossum are represented in Fig. 2. They are worth

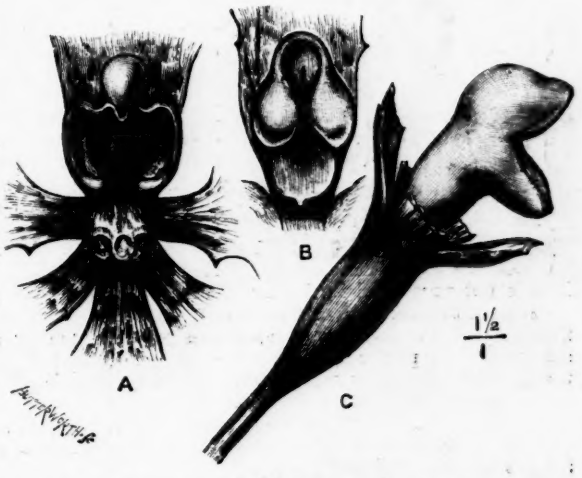

Fig. 2.—The essential sexual organs of *O. grande*. A, Before pollination. B, Seven days after pollination. C, Lateral view of the ovary one month later.

following. The ripe sexual parts are shown at A; after receiving a pollinium they gradually approximate, B; the petals and the labellum quickly fade, and a few weeks later the ovary is enlarged, C. The ovary continues to

increase in size, and five months later has the appearance shown in Fig. 3.

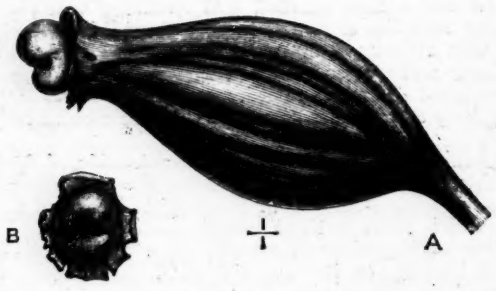

Fig. 3.—A, The ovary of *O. grande* five months after pollination. B, The shrunken remains of the rostellum. The seeds require nine months for ripening.

If we knew the force which impels the spermatozoon to seek an ovum many facts would be plain in pathology. We should know how the embryo of the guinea-worm recognizes its host the water flea (Cyclops), and the embryo of the liver fluke, the pond snail. A hundred similar examples could be adduced from the natural history of parasites.

The selective power possessed by the embryo of the liver fluke (*Fasciola hepatica*) for the pond snail (*Lymnaea truncatula*) has been graphically described by Thomas. The ciliated embryo is exceedingly active, swims swiftly and restlessly through the water. Sometimes it goes directly through the water and then rotates on its longitudinal axis, just turning a little to one side, as if seeking for something. When the embryo comes in contact with any object it pauses for a moment and feels about as if trying to test its nature, and, if not satisfied, darts off hastily again. But if the object be a pond snail, it at once starts to bore, and forces its way into the tissues of the snail (Fig. 4). The embryo has been tested with all the common forms of pond and river snails, but it refuses all except occasionally very young specimens of *L. peregra*, and in this development was arrested at an early stage. It is remarkable that the embryo fluke should be so particular in its selection of a host, for if it is not successful in finding one it dies in eight hours.

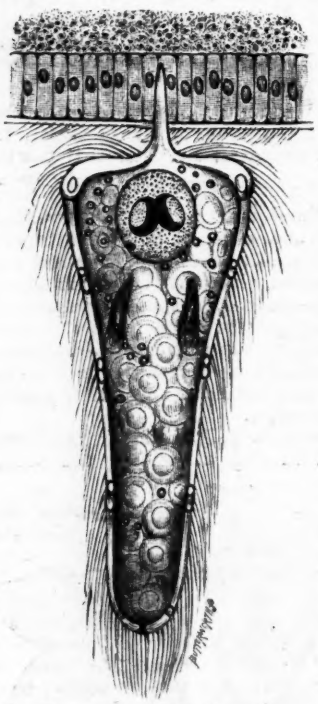

Fig. 4.—An embryo fluke engaged in boring into the tissues of a pond snail—× 500. (After Thomas.)

Whatever this remarkable force may be, it has a human interest, for it is doubtless the same influence which leads some men to prefer brunettes and other blondes. If we understood it, perhaps we should be able to explain why some blondes of delicate form and feature are fascinated by men of the type of Hercules and Vulcan, such as wrestlers, boxers, and blacksmiths, resisting the importunities of suitors possessing the attributes of Adonis.

The exquisite description furnished by Thomas of the manner in which the young fluke desperately hunts for a pond snail, is an admirable example of knowledge obtained by observation. Whenever reasoning is uncontrolled by facts, imagination is apt to be riotous. An extraordinary example of the perfervid speculation is contained in the Sardinian Report on Cretinism (Turin, 1848), for the reporters seriously urge that a cretin may be due to sexual connexion between a man and a woman when one or both are drunk. The idea of an encounter between a jovial spermatozoon and a drunken ovum in the Fallopian alley is something peculiarly comic.

Although the idea of sex cells being influenced by the drunkenness of the individuals to which they belong sounds odd, there is no absurdity in the belief that morbid conditions of the parents influence egg and sperm. Those who have made prolonged and careful study concerning the possible causes of those malformations covered by the general term "monstrosities" are unanimous in the belief that the general health of the parents influences the physical development of the offspring. A careful consideration of the facts also justifies the opinion that the union of gametes in a malign environment is often expressed by a malformed embryo. Experimental teratology not only supports this conclusion, but adds trauma as a cause of monstrosity. The observations of those biologists who have studied vegetable teratology offer testimony in the same direction.

Parasitic Castration.

A good example of disturbed metabolism leading to changes in the sexual glands, and in the secondary sexual characters, is that known as parasitic castration, discovered

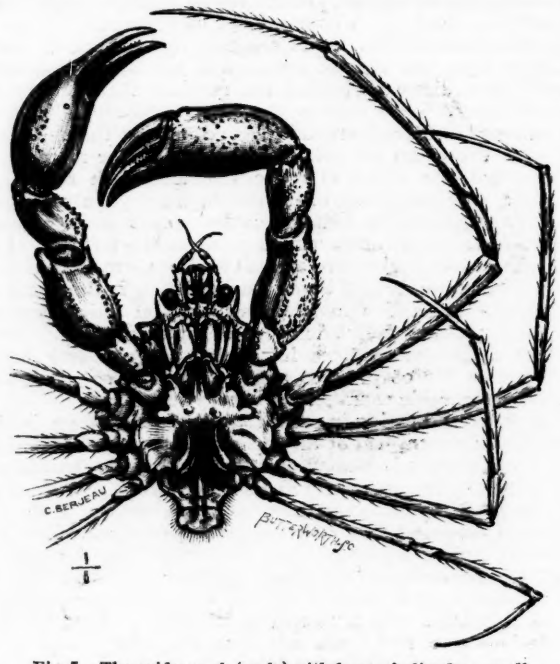

Fig. 5.—The spider crab (male) with large chelipedes, small abdomen, and the large copulatory styles.

in 1887 by Giard. This matter has been particularly studied in the spider crab *Inachus* and in the hermit crab. The facts are briefly these:

The male inachus (Fig. 5) is furnished with long and swollen chelipedes; the abdomen is small and furnished with a pair of copulatory styles. In the female (Fig. 6) the chelae are small and narrow, but she has a larger abdomen, which is trough-shaped and carries four pairs of ovigerous appendages. These crabs often harbour *Sacculina neglecta*, a peculiar barnacle which has taken to live parasitically on the crab. When the sacculina is hatched it swims near the surface of the sea and becomes transformed into the well-known Cypris larva. After living for a time a free existence, it seeks out a crab and fixes itself by means of hooks to a hair on the crab and penetrates its base. The larva then discards its appendages and as a small mass of undifferentiated cells enters the crab's body, and reaches the space round the intestine usually near the stomach and proceeds to throw out roots in all directions. When first discovered, sacculina, being so unlike a crustacean, was regarded as a tumour by one naturalist and as a worm by another.

This invasion has extraordinary effects on the male crab, for it ceases to moult, the chelae diminish in size, the abdomen broadens, ovigerous appendages appear and cause

it to assume the external characters of a female crab. At one time, in consequence of these changes, it was supposed that sacculina only attacked female crabs. In the presence of the parasite the generative organs undergo degeneration and disintegration. The sequel is even more remarkable, for when the parasitic barnacle leaves its host the crab recovers, and, in the case of the male crab which has assumed female characters, the testis not only regenerates but becomes a true hermaphrodite gland capable of producing ova and spermatozoa. These remarkable changes have been especially studied by Geoffrey Smith.

It will at once occur to many that these observations have some bearing on the peculiar alterations of plumage seen in pheasants, peacocks, ducks, and chaffinches, in which the hen moults and, without obvious reasons, assumes the resplendent plumage, more or less complete, of the cock. Such birds are known as cock-feathered hens, and the change of plumage was supposed to depend on atrophy of the ovary. We know nothing concerning its cause, although many clever observers, including Hunter and Darwin, have considered it.

The changes which occur in the testis of a spider crab infested with sacculina, whereby it becomes converted into a hermaphrodite gonad, is a matter of great interest. The history of our own bodies teaches us that at an early

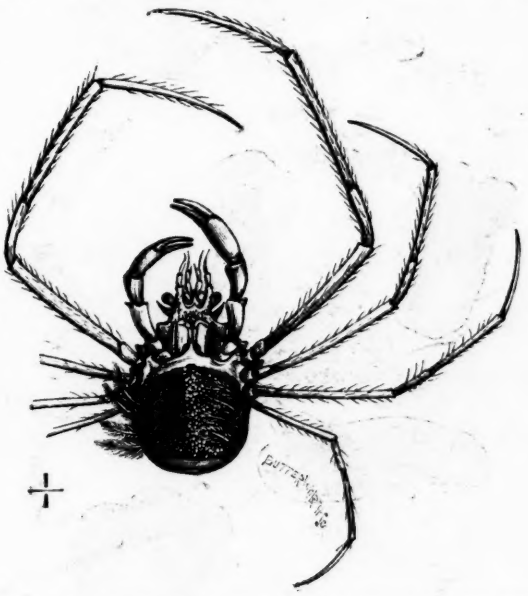

Fig. 6.—Spider crab (female). The chelipedes are small and the abdomen broad. The ovigerous appendages are shown free on one side, and on the other with eggs upon them.

stage the human embryo is hermaphrodite. When the gonad is an ovary the sexual organs assume the female type; when the testis predominates the male type prevails. At the very threshold of our practical acquaintance with human anatomy we learn that vestiges of the male reproductive organs are present in the female, and many vestiges of the special female organs exist in the male; some are present in the gonad itself, whether it be an ovary or a testicle. It is an interesting fact that in the male spider crab the testis, under the influence of parasitism, can produce ova. Although there is an enormous distance between crustaceans and man, these observations do bear on those rare instances in which dermoids arise in the testicle, for these remarkable tumours in men and in horses, though usually described as testicular, really arise, as I have often pointed out, in the ovarian vestiges known as the rete testis.

Ovarian Dermoids.

Apart from observations relating to "parasitic castration," some useful investigations have been carried out in the last twenty years which throw some light on the curious tumours known as ovarian dermoids. In 1880 I saw for the first time an ovarian cyst containing hair, grease, and teeth. I have removed a great many since, but my interest in them persists. Thirty years ago all tumours containing cutaneous structures growing in divers parts of the body were called dermoid cysts; I soon recognized that such tumours were sufficiently important to form a group. Dermoids which arose in the ovary differed in so many particulars from those found in other parts of the body as to demand a genus to themselves. Whilst investigating the structures in ovarian dermoids I found and described the bodies now familiarly known as "ovarian mammae," and exhibited a series of cysts containing them to the Pathological Society in 1888. About ten years afterwards Wilms published his investigations on dermoids, which modified current views on these tumours, for he showed that the curious nipple-like processes and mammary structures, which he named embryonal rudiments, were important elements. Every dermoid, or embryoma, as it is now called, consists of a cyst and an embryonal rudiment. The wall of the cyst is of fibrous tissue, and at one part of its inner wall presents a skin-covered surface beset with hair; the embryonal rudiment appears as a nipple-shaped process projecting from the skin-covered surface. Its size varies greatly, for often it is so inconspicuous as to be easily overlooked, or it may be big enough to strike the eye of the least observant. The cavity which contains the embryonal rudiment is filled with oil, grease, or lumps of suet mixed with hair and epithelium shed from the cutaneous surface. Some embryonal rudiments are more complex, and contain such organs as a thyroid gland, fibrous or osseous capsules lined with pia mater and filled with nerve tissue.

On two occasions an organ like an eye has been found with a cornea, an anterior chamber, and a cavity lined with the conspicuous black uveal tissue (Baumgarten, Frankland, and Cleland). Organs obvious to the meanest intelligence are bones, cartilage, and teeth; less obvious than these is mucous membrane such as occurs in the intestine (Frank, Shattock, and Williamson).

We have been contented in the past with an examination of these bodies by means of microscopic sections, but Shattock, in a brilliant investigation, has shown that when some of these embryonal rudiments are studied by dissection rather than by thin sections, organs may be identified in them. In one example he found nerve matter present in the form of a thin-walled sac; the inner wall of this sac was lined with columnar epithelium and the halves of a spinal cord lay on each side of it. This hydromyelic sac represented the dilated central canal (syringomyelia) of an imperfectly developed spinal cord. In another cyst he found a smooth-walled cavity containing a blind coil of gut possessing the structure of small intestine. I have often pointed out that nearly all the organs found in ovarian dermoids are of epiblastic origin. Organs such as lung, liver, and kidney have never been found. This serves to distinguish ovarian dermoids from the teratomatous representatives of conjoined twins.

The great principle underlying tumour formation conceived by Müller and established by Virchow postulates that every neoplasm, using this term in its strict pathological sense, arises from pre-existing tissue of the same structure, therefore we must seek a reason for the presence of tumours in the ovary containing teeth, skin, nerves, and intestine. The conclusion is plain—they are the products of a sex-cell or ovum. From the earliest observations on ovarian dermoids the idea that they were imperfect pregnancies took deep root in the minds of the men who examined them, and the discovery of parthenogenesis, or the development of an ovum without impregnation (von Siebold, 1856), provided a plausible theory.

Conjoined Twins.

Although the observers who described ovarian dermoids before the discovery of spermatozoa regarded them as "imperfect pregnancies," they were careful to point out that these tumours could not be the products of conception in the ordinary sense, for some of them occurred in infants. On examining the "indigested and deformed lump," known as an embryonal rudiment, we have difficulty in believing it to be an embryo, especially when it contains only an eye, or a fragment of spinal cord, or a few teeth connected with an orifice representing perhaps a mouth. All these odd imperfections can be paralleled by twins. It is not an uncommon event for an ovum to give origin to two embryos, and both may attain full development, make their entry into the world, and survive as independent individuals.

Occasionally the twin embryos develop equally, but are

partially joined together, and in this condition survive to the normal period of delivery. Many conjoined twins die in the course of being born, but a few escape with their lives, grow up, and in due course earn money for enterprising showmen as freaks. When twin embryos are conjoined it does not necessarily follow that each goes on to full development; occasionally one of them is represented by a shapeless mass attached to its brother or sister as the case may be. Matthews Duncan tells of a case in which a parasitic fetus of this kind was attached to the buttocks of a young man, occupied as a clerk, who spent the greater part of the day sitting on his sadly deformed twin brother. A shrunken parasitic fetus stuck on an otherwise well-formed individual recalls the delightful conception of Thackeray in the story of *The Rose and the Ring*, wherein the porter, Jenkins Gruffanuff, is transformed into a knocker on the front door for his rudeness to Fairy Blackstick.

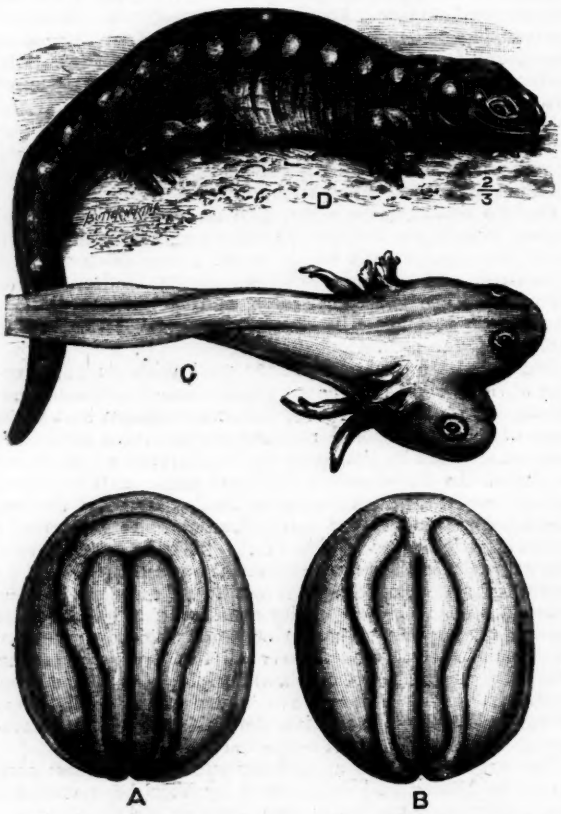

Fig. 7.—A, Normal egg of the American salamander, showing the medullary folds. B, An egg with abnormal medullary folds from which the double-headed embryo C was formed. D, The adult form of the American salamander. (Figs. A B and C after Clark.)

Embryologists agree that conjoined twins are the product of a single egg. A strong body of circumstantial evidence of a most convincing kind can be adduced in support of this opinion. Moreover, the development of a double embryo from a single egg has been actually witnessed in the case of a batrachian. In the spring of 1879 Clark of Boston had in his aquarium 2,000 or 3,000 eggs of the American salamander, *Amblystoma punctatum*, for the purpose of studying their development. He found one with the medullary folds nearly completed, but they had not united at the cephalic end, and appeared to be much rounded at their anterior ends, instead of having the ordinary vague outlines; it was set apart for observation (Fig. 7). Each free portion of the medullary fold developed a perfect head, which, at first partly united, became gradually more so until they were connected throughout their length. Posterior to the heads were no signs of duplicity.

The development of double-headed embryos from single eggs is a frequent event in salmon hatcheries. An instructive series is shown in Fig. 8, comprising twins and bicephalous salmon fry in various stages of dichotomy, but all exhibiting a common feature, for in each the yolk sac is single.

The frequency of such malformation among salmon obtained in hatcheries probably depends on the artificial mode of fertilization. In relation to this it may be mentioned that in some experiments on cross-fertilization made by Gemmill on the eggs of starfishes, he found the ova of *Solaster endeca* strongly attractive to the spermatozoa of *S. papposa* and are fertilized by them; segmentation and development proceeded in some specimens, showing various abnormalities of growth.

It is possible to arrange a series of parasitic fetuses so rudimentary as to parallel the confused and ill-shaped "embryonal rudiments" so common in ovarian dermoids. Such a series and such a comparison make the conclusion irresistible that the embryonic rudiment, like the parasitic fetus, is the product of an ovum. The structure of the embryonal rudiment supports, in a measure, the opinion that it is an embryo arrested at an early stage of its development. The frequent presence of nerve tissue, neuro-epithelial elements, and ocular tissues is not surprising, because the neural tube from which the spinal

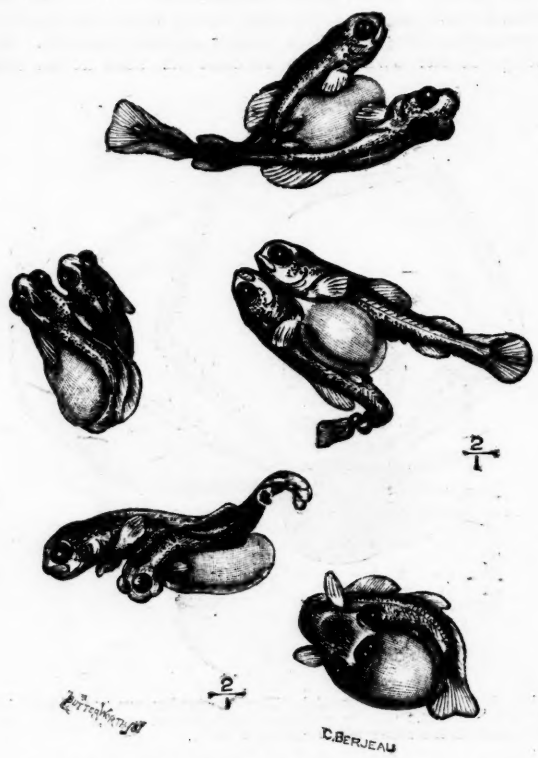

Fig. 8.—Twin salmon embryos from a hatchery, showing monstrous development with one common feature—the yolk sac for each monstrous form is single.

cord, brain, and ophthalmic cups are formed is an early and conspicuous structure in all mammalian embryos.

Traumatic Parthenogenesis.

At the outset I laid special emphasis on the fact that our knowledge of the fertilization of mammalian ova is derived from observation made on the eggs of low animal forms. We have been too long satisfied with the opinion that it is only the contact of a spermatozoon which will start an ovum on its extraordinary career of development, but there are other stimuli which will induce a mature ovum to segment. Loeb's experiments show that the mature eggs of starfishes can be made to develop by the addition of soda water to the sea water of the aquarium or by mere shaking (shock fertilization).

Professor Bataillon, Dean of the Faculty of Science, Dijon, has succeeded in inducing complete embryogenesis by puncturing the virgin eggs of frogs with exceedingly fine metal stylets. The eggs were obtained from the common grass frog, *Rana temporaria* (Fig. 9). The frogs were carefully washed in water saturated with bichlorides to prevent any accidental contamination with spermatozoa. The instruments were sterilized in a flame immediately

before use. The eggs after removal from the oviduct were placed in flat-bottomed receivers and covered with water at 15° C. Each egg was then punctured by a short stylet made of glass, manganin, or platinum, varying in thickness from 20 to 30 micromillimetres. A slight track in the egg marked the line of puncture. In making the puncture Bataillon aimed to get at the egg at a point excentric of

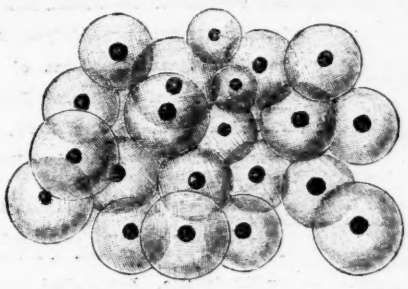

Fig. 9.—Eggs of the grass frog, *Rana temporaria*. (Natural size.)

the black hemisphere. The punctured eggs were covered with water and effected their rotation in forty-five minutes, so that the black spheres were uppermost as in normally fertilized eggs, whilst the virgin unpunctured eggs were disposed irregularly. Four hours later segmentation began in the eggs and proceeded as quickly, and in one-third of the punctured eggs as regularly, as in eggs normally fertilized, but arrest of development took place at all stages. In 10,000 eggs which he punctured three developed complete tadpoles (Fig. 10). Bataillon states that the

Fig. 10.—Three tadpoles produced by traumatic parthenogenesis. The tadpole near the top of the vase was the result of an experiment performed March 9th, 1910; it died June 18th, 1910, in consequence of shock due to changing it into a jar for the purpose of being photographed. (After Bataillon.)

critical period for a tadpole produced in this way is when the tail begins to regress. The consideration of these experiments must make us think that if the eggs of human beings were as big as those of the grass frog many problems in human embryology would be less misty than they are to-day.

The consideration of traumatic parthenogenesis would not be complete without reference to the conduct of the chromosomes in the cells of these segmenting eggs. All animal cells contain in their nuclei a definite number of chromosomes, and though the number varies in different species of animals, it is constant for a given species, but the number of chromosomes in an ovum during its maturation is reduced one half; they are also changed in character. A similar condition exists in the spermatozoon, but when the ovum and spermatozoon unite and form an oösperm or zygote the number of the chromosomes in the zygote equals that of the somatic cells. The significance of the change is not understood, but it has served as a text for much vague speculation, especially in relation to sex and heredity.

It has been ascertained that the chromosomes in the parthenogenetic larva of frogs are of the reduced type. This is a matter of interest, and probably explains the failure of Bataillon's method to produce complete frogs. It also helps us to understand the incompleteness and the unlikeness of the embryonal rudiment to a human fetus, in spite of the high standard occasionally attained by its component tissues. It is undeniable that the organs existing in ovarian dermoids are rarely of the same completeness as those of parasitic fetuses; the muscles even of a shapeless conglomerate twin sessile on the sacrum of its autosite will twitch when mechanically irritated, but no organ in an ovarian dermoid has ever been reported in a functional condition. This indicates the value of the spermatozoon for the production of a complete individual.

Epithelial Infection.

No surgeon will deny that the ovarian dermoid in its common form is the most benign tumour that attacks women, but it is not to be forgotten that the epithelial elements of such tumours often possess remarkable vitality, which is occasionally manifested in a curious way. At least half a dozen cases have been carefully reported where such a tumour has been burst by violence, and its pultaceous contents—hair, grease, and epithelium—spread far and wide through the abdominal cavity. (In one instance, described by Randall and Lawrence in 1908, the leakage occurred from a hole made in the procedure known as tapping.) Some of the epithelium engrafted itself on the peritoneum, so that in the course of an operation performed for the purpose of removing the tumour, the surgeon found the serous surface of the viscera and the omentum beset with nodules, many of them possessing a tuft of hair. These epithelial weeds, to use an agricultural term, differ from those secondary nodules which are such a common feature of cancerous infection of the peritoneum, for they remain as grafts upon the serous membrane, and do not penetrate the underlying tissue nor display the invasiveness which is such a marked feature of the cancerous nodule. This induced me to apply the term *epithelial infection* to this phenomenon. One of the earliest examples was described in 1867 by Moore; the specimen is preserved in the museum of the Middlesex Hospital.

I have satisfied myself that it is not an easy matter for dermal cells to engraft themselves on the peritoneum. These elements may be loose in the abdominal cavity for a long period and fail to become engrafted. Lucy recorded a striking case in which an ovarian dermoid leaked and distended a woman's belly with the usual sebaceous paste; her belly was so full that the mass pitted as if it were plastic clay when pressure was made upon it with the finger. At the operation he removed 11 lb. of the pultaceous sticky stuff. In spite of this prolonged contact of such a large amount of epithelial material with the peritoneum there were only two grafts.

A critical study of cases in which this peculiar epithelial infection has occurred led me to express the opinion, in 1896, that the facts pointed in the direction of occasional malignancy, but a further study of this matter in the wards, *post-mortem* room, and laboratory convinced me that the innocency of these tumours could not be impeached with the scanty and unreliable evidence available at that time. I thought that the few examples which had been published where small dermoids were found on the peritoneum could be regarded as examples of epithelial infection.

Malignant Teratoma.

We know now beyond any doubt of a variety of the ovarian embryoma (or teratoma) in which malignancy is displayed in a very intense form. This tumour occurs in girls and young women as a solid or semi-solid mass, and rarely attracts attention until an increase in the size of the abdomen is noticed by the patient or her relatives. The tumour grows quickly, disseminates like cancer, recurs very rapidly after removal, and destroys life in a few weeks or months. No tumour is more deadly, not even a periosteal sarcoma of the femur, or of the humerus. These malignant ovarian teratomas consist of a hotchpotch of embryonic elements of various kinds, such as

epithelium, neuro-epithelium, pigmented retinal cells, enamel organs, dentine-papillae, skin, hair, cartilage, ganglia, and medullated nerves. These tissues occur in the nodules which grow throughout the abdomen, and in those which grow in the substance of the liver or the lungs. Details of at least fifty examples of the malignant ovarian teratoma are available for study; many of the tumours have been investigated by competent men.

The condition I had in my mind that led me in 1896 to express my belief in the innocency of the cystic variety of ovarian embryomas was the alleged occurrence of cancer in the embryonal rudiment, especially the ovarian mamma. Several surgeons interested in the pathology as well as in the surgery of ovarian tumours sent me occasionally descriptions and sections of specimens which they believed were examples of carcinoma arising in ovarian dermoids. In all the specimens submitted to me none would bear this interpretation, and my opinion has been supported by the subsequent histories of the patients. In 1897 Professor Yamagiva, of Tokio, described a cystic teratoma of the ovary containing a mamma, which he believed had become cancerous, but the evidence is by no means convincing. Since that date we have become familiar with a subtle form of cancer dissemination known as "implantation."

Implantation Cancer.

When a woman is attacked by cancer in the gastro-intestinal tract, gall bladder, breast, or Fallopian tube, the cancerous cells permeate the adjacent tissues and are shed into the belly cavity; these cells, floating in the peritoneal fluid, are dispersed throughout the abdominal cavity. If the woman be so unlucky as to have an ovarian cyst or a dermoid in her pelvis, some of the cells will be deposited on the cyst wall, and some of them grow and form blocks of secondary cancer. I exhibited and described several specimens of implantation cancer to the Society in 1910. Large numbers of cancerous cells which are shed into the abdominal cavity perish, for the peritoneum exercises a defending or prophylactic power against such marauders; but the ovaries are more easily colonized, as they lack a peritoneal investment.

This new knowledge concerning the deposition of cancerous cells on normal ovaries as well as on ovarian cysts is of importance, because it renders previous records relating to specimens of primary ovarian cancer of no account. In future descriptions it will be essential for the recorders to furnish evidence that there was no primary cancerous focus in the stomach, big intestine, gall bladder, breast, or Fallopian tubes. A very small primary cancerous focus in the colon, though it has produced a big block of cancer in an ovarian cyst, will sometimes elude the surgeon's fingers and eyes in the course of an operation. Such small contracting cancers later cause intestinal obstruction, and are found in the course of a colotomy, or at a *post-mortem* examination, weeks or months after an ovariotomy.

In considering primary cancer of the ovary and in ovarian dermoids we have to clear away old records and begin anew. The distinction between a cystic ovarian embryoma and a malignant teratoma is as sharp as the difference between a simple chondroma and a chondrifying sarcoma, but there are, as in other genera of tumours (except lipomas) described as innocent, gradation forms by which we pass from species of undoubted innocency to others of the most pronounced malignancy.

Every surgeon has pondered often and long on that common feature of cancer known as "dissemination," wherein the histologic peculiarities of the primary tumour are reproduced in the secondary nodules; but the nodules due to the dissemination of malignant teratomas contain such structures as hair, skin, nervous tissue and embryonic teeth. These can only come from the activity of a developing ovum. We know that microparasites can stimulate growth in epithelial cells, and it is possible that benign ovarian dermoids and malignant teratomas express variations in the effects produced by minute agents, which are able to provoke segmentation in mature ovarian ova, though in a more subtile way than Bataillon's stylets.

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THE INFLUENCE OF AGE AND TYPE OF PATIENT UPON THE COURSE AND TREATMENT OF APPENDICITIS.*

BY

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So much has been written about appendicitis, and the disease in all its aspects has been so carefully studied, that it would seem that there can be little left for us to learn. So common is it amongst all classes of society that every medical practitioner must frequently meet with it, and has ample opportunity of acquiring a practical as well as a theoretical knowledge of its clinical manifestations. I speak advisedly when I state that of all the acute abdominal diseases appendicitis is most promptly and most accurately diagnosed. We early recognize the disease, we are alive to its dangers, we are familiar with the signs which call for urgent surgical interference, and we continue to lose a certain percentage of our patients. That this is not due to the operative risk of simple removal of the appendix is certain, for Sir Frederick Treves has recorded 1,000 cases of appendicectomy for chronic appendicitis without a death, and in the past five years nearly 400 patients, whose ages ranged from 4 to 69, have been operated upon at the Queen's Hospital, Birmingham, during a quiescent period without a single fatality. These hospital statistics are of special value, in that they represent the work of no particular surgeon, but of several, and are free from the suspicion that any attempt has been made to improve the statistical results by submitting only those cases to operation which were likely to do well.

It is generally agreed that almost equally good results would follow removal of the appendix within the first twenty-four hours of onset of an attack of appendicitis, and ideally this is undoubtedly the best treatment. There are, however, practical difficulties in the way of operating upon many cases at this early stage. It is often difficult at such short notice to get a surgeon and make the necessary preparations, and the surroundings of the patient are often very unsuitable for an operation. The difficulties are not, however, except in rare instances, so great as to prevent operation were it certain that such is absolutely necessary. It is this doubt as to the necessity for operation at all that is responsible for the delay. That many patients recover under expectant treatment is perfectly

* Read before the Worcestershire and Herefordshire Branch of the British Medical Association.

certain. Further, many others are saved by operation at a later stage, when the necessity for it becomes obvious.

I will not discuss the general question as to whether it is better to operate immediately in all cases or to pursue a policy of "wait and see." Good reasons can be advanced in support of both lines of treatment. I do, however, wish to draw attention to the very important bearing of the personal equation of the patient upon the question in each particular case. It is failure to take this factor sufficiently into account which is responsible for most of the deaths from appendicitis at the present time.

As I have already said, we can all diagnose appendicitis accurately and at an early stage. We are all familiar with the danger signals and are quick to appreciate their significance. But in the early stages none of us can tell what course the disease is going to take. Any one who ventures upon a definite prognosis within the first twenty-four hours of the onset will meet with some rude shocks. To me it is this element of uncertainty as to its future course which constitutes the anxiety associated with appendicitis. It is easy to tell whether the patient is seriously ill or not at the moment, but it is impossible to foretell the future course of the disease. Will it subside and operation be unnecessary, or will it progress and a favourable opportunity be lost? Any light which can be thrown upon this difficult and anxious question is of the utmost value. Very little help is to be gained from the surgical textbooks or even from special works upon appendicitis, and it is because of this that I have ventured to call your attention to a few points which I regard as of great practical value.

As in all other acute affections, appendicitis must not be considered as a disease only, but as a disease affecting a particular individual. The type of person attacked influences very markedly its clinical course and prognosis, and should also influence the surgeon in deciding upon its treatment. When confronted with a case of acute appendicitis within a short time of its onset, we know that there are three possibilities ahead: (1) The attack may subside without operation; (2) operation becoming necessary at a later stage may save the patient; or (3) late operation may fail to prevent death. The last result may occur in spite of careful watching by the most experienced surgeons if definite danger signals are waited for before resorting to operation. Danger must be anticipated in some cases if it is to be avoided. The type of patient attacked must be the deciding factor in the question of delay or prompt interference.

I will say at once that in my opinion delay is dangerous and unjustifiable in the case of children under 12, and adults over 40. Operation should follow immediately when a definite diagnosis of acute appendicitis has been made in these two classes of patients. My reason for making this statement, and I wish to make it as dogmatically as possible, is not that many of these patients may not recover without operation, although the percentage of such recoveries is considerably below the average of all cases, but that the mortality associated with late operation is so great. In other words, if the disease progresses, and it is much more likely than usual to do so, many patients will die in spite of late operation.

I would point out that my remarks only apply to comparatively small groups of cases. Appendicitis is far more frequently met with between the ages of 12 and 40 than either before or after that age period. An examination of the statistics of all the cases of appendicitis, acute and chronic, admitted into the Queen's Hospital during the past five years shows that out of a total of 742 cases 168 were children under 15, and 61 adults above 40. For convenience, patients in the hospital records are grouped in quinquennial periods, but taking the higher age of 15, less than 23 per cent. were below that age and less than 9 per cent. were more than 40 years of age.

A closer examination of the hospital records reveals facts which strongly support my contention that acute appendicitis has a higher mortality in the special groups referred to than is the average for all cases. Practically every acute case was submitted to operation within an hour or two of admission, so that the differences in results can only be accounted for by differences in the recuperative powers of the patients; in other words, by the personal equation of the individual.

During the five years 360 patients were operated upon for acute appendicitis complicated either by abscess or peritonitis. Of these, 115 were children under 15, 202 were aged between 15 and 40, and 29 were over 40. The total number of deaths was 48, a general mortality of 13.3 per cent. Amongst the 115 children, 20, or 17.8 per cent., and of the 29 cases over 40, 10, or 34.5 per cent., died. The mortality in the three groups was 17.8 per cent. for children, 9 per cent. for persons between 15 and 40, and 34.5 per cent. for adults over 40. From these statistics, therefore, it would appear that, assuming age to make no difference to the prospects of an acute attack subsiding without operation, in the event of complications developing which demand operation the chances of recovery are only half as good in the case of children, and quarter as good in the case of elderly people, as they are for young adults between 15 and 40. This in itself is a strong argument for early operation upon patients coming within the first two groups. If, in addition, as I am certain is the case, palliative treatment is less successful in children and elderly persons, the argument becomes stronger still.

So interesting and important is the influence of age upon the course and outlook in acute appendicitis that it well repays investigation, and a reference to some of the peculiarities of the disease in the young and the old may not be out of place.

Children.

Anyone who has had much experience of appendicitis cannot fail to have been impressed by the larger proportion of children amongst the more serious cases and especially amongst those ending disastrously. Everything points to the fact that appendicitis is more dangerous in children than in adults. The various stages are passed through more rapidly, less resistance is opposed to the spread of infection, and the associated toxaemia is less well borne. Many times I have been struck by the rapidity with which a child becomes seriously ill; within a few hours the clinical picture will completely change. Seen in the morning everything appears satisfactory; at night the child is extremely ill, and manifests all the danger signals. I believe that this is the reason why one sees so many "late" cases of appendicitis amongst children—they become so in less time than do adults. It is not because the doctor has been negligent, but that he has followed the rules applicable to the adult, and has omitted to take into account the age of the patient. I have long felt that the ordinary teaching with regard to appendicitis needs considerable modification in the case of children. Over and over again I have seen cases where in adults one might reasonably expect resolution, or at worst a localized abscess, in children go from bad to worse. Some of them are indelibly stamped upon my memory as instances of mistaken judgement, the penalty for which has been lost lives.

One reason why a higher proportion of children diagnosed as suffering from appendicitis develop dangerous complications is probably due to the fact that the milder forms of the disease are more often overlooked than in adults. Attacks of abdominal pain, vomiting, and bowel disturbance are very common in young children, and catarrhal appendicitis is easily, and probably is frequently, overlooked. It is only by careful observation and repeated examinations that a correct diagnosis is possible. As a rule appendicitis is only diagnosed when there are definite objective signs of inflammation in the right iliac fossa. In other words, only the more severe forms of appendicitis are recognized, and this fact alone should make us more careful with regard to them.

A point in connexion with the pathology of acute appendicitis in children is the almost constant presence of a concretion. Kinks and strictures are less frequently met with than in older persons. In a very large proportion of children upon whom I have operated during the acute stage a concretion was present and had caused perforation of the appendix. The appendix generally may be fairly healthy, but in some place there is a concretion over which gangrene and perforation of the appendical wall has taken place. It is clearly a pressure necrosis induced by swelling of the concretion from absorption of moisture. The effect of a catarrh of the mucous membrane is increased secretion of fluid. This is absorbed by the concretion, and the effect is that it swells, just as a dried pea would, and becomes too large for the space in which it lies. Such a condition precludes the possibility of resolution. If adhesions have

previously shut off the general peritoneal cavity, or if the perforation occurs on the outer side of or behind the caecum, an abscess forms. If, however, the appendix is free and in its usual position, perforation is at once followed by an acute spreading peritonitis.

Failure to appreciate the significance of the clinical phenomena associated with these pathological events has been responsible for many mistakes. A child during the first few hours of an acute attack of appendicitis suffers from severe abdominal pain, reflex vomiting, a rise of temperature, and a rapid pulse. These symptoms *suddenly* subside—the pain disappears, or almost so, the vomiting ceases, temperature and pulse fall, and the child looks and feels much better. Gentlemen, acute appendicitis never subsides in this way; it disappears by lysis and not by crisis. Sudden improvement means rupture of the appendical wall and relief of tension. It is of ominous import, and calls for immediate operation.

One other vexed question in connexion with appendicitis in children is whether an abscess should be operated upon early or late. An interesting correspondence upon this point appeared in the British Medical Journal about a year ago. It is well known that death from profound toxaemia and collapse may occur within a few hours of operation. This result followed operation in several children of distinguished parents, and created a painful impression. The explanation appears to be that the necessary manipulations lead to an exposure of raw surface from which a lethal dose of toxin is absorbed into the system. The doctrine that it is wise to defer operation in any case of appendical abscess is a dangerous one. The safe course is to open the abscess with a minimum amount of disturbance of tissue, to insert a tube, and to postpone removal of the appendix to a later date. The danger associated with these abscesses in children is, however, only another argument in favour of early operation. Such problems would rarely arise were it accepted that the diagnosis of acute appendicitis in a child carries with it the necessity for immediate operation.

The Middle-aged and Elderly.

As I have already stated, experience, supported by the statistics given, indicates that late operation is followed by an exceptional percentage of deaths in people above 40 years of age. The death-rate at the Queen's Hospital during the past five years has been nearly 35 per cent. This is due to the fact that the resisting and recuperative power of these patients is less, and the risk of complications such as pneumonia is greater, than in the case of younger persons. An acute attack of appendicitis in a middle-aged or elderly person, especially when stout, causes great anxiety to the medical attendant, who realizes that abdominal section in such cases is a very different procedure, as regards gravity, from what it is in the case of a young adult, and his natural inclination is to await developments rather than advise early operation.

I feel strongly that this delay is fraught with grave danger. The risk is almost entirely due to the disease and not to the operation. This is supported by the fact that no death occurred amongst 32 consecutive patients above 40 who were operated upon at the Queen's Hospital during a quiescent period.

In the case of healthy young adults a waiting attitude may be adopted with a certain amount of impunity. If the patient becomes worse, operation still holds out reasonable prospects of successful rescue. But in the elderly the conditions are very different; late operation fails to save in a far larger percentage of cases. It is essential to realize that a man whose condition to-day is so grave that operation would be attended by serious risk, not so much on account of his inflamed appendix, as on account of his age, his fatness, and his general lack of resisting power, will, if his disease progresses, be so ill to-morrow that the chances afforded by operation will be poor indeed. I have known many instances where delay in such cases has led to disastrous results. When the surgeon is forced to undertake a late operation because it is obvious that expectant treatment has failed, the patient almost always dies.

No, the position must be faced and the question of operation settled at an early stage. I have no fault to find with the man who decides at an early stage that in a particular case the whole chances of the patient are better without operation than with it, but I do most strongly deprecate vacillation and postponement of decision until to-morrow. If worse, you cannot save your patient to-morrow. Realizing this fact, there are few cases where the decision will be against operation, and if decided upon, the earlier it is carried out the better. It seems to me that logically, in these cases, to operate as soon as a definite diagnosis of acute appendicitis is made is the only safe course. Only when operation, on account of the patient's general condition, would be attended by very grave risk should the rule be departed from, and then the decision against operation should be final.

In elderly people acute appendicitis manifests peculiarities which may lead to error. My experience is that the course of the disease is very insidious. The symptoms and objective evidence furnish no certain guide to what is going on inside. The temperature, pulse, and general condition often induce a false sense of security, which is rudely disturbed too late. It is not unusual to see a man lying comfortably in bed with a comparatively slow pulse, an almost normal temperature, and who expresses himself as not feeling ill, and who yet has a gangrenous appendix and a rapidly-spreading peritonitis.

In the elderly, as in children, the pathological condition is more often such that spontaneous recovery is impossible. It is common, even at an early stage, to find the appendix gangrenous in almost all its length and with little or no evidence of an attempt to localize infection. This probably accounts for the fact that the early reflex symptoms are so little marked. These precede gangrene and disappear when it occurs. In these cases I have almost invariably found the local condition worse than was expected, and have never had cause to regret early operation. For the reasons that in elderly people it is more difficult to estimate the gravity of the disease by the clinical phenomena, that resolution is less likely to occur, and that if serious complications do develop they cannot be successfully combated, I am of opinion that it is imperative to operate as early as possible.

THE OPERATION FOR ACUTE APPENDICITIS:

PRIMARY CLOSURE OF THE ABDOMINAL WOUND.

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At the discussion on the Treatment of General Septic Peritonitis which took place at the Annual Meeting of the Association in Birmingham last summer,[1] a discussion which was ably introduced by Professor Rutherford Morison, Newcastle, I—in the opinion of some of the subsequent speakers—had the temerity to make the following statement:

> I desire to deal alone with the appendix as the *fons et origo mali* (of general septic peritonitis). The offending appendix—in this class of case usually gangrenous, and possibly perforated with an extruded concretion lying in its immediate neighbourhood—is removed in the usual fashion. The stump must be well buried. The bed of the appendix and the surrounding structures are swabbed with iodine (4 per cent.), mopped dry, and the gridiron wound, after similar treatment with iodine, is closed in layers. I am firmly convinced that this method of closure without drainage is sound surgery. It must be proved, however, to be not only as safe but safer than when drainage is employed. If the cause be removed much more can be left to the peritoneum than was formerly thought possible.

Seventeen cases were reported which had been dealt with in this fashion. One of these 17 cases died six hours after the operation; in 8 the wound healed primarily; in the remaining 8 there was some degree of septic infection of the wound. To obtain primary union at all with such a degree of intraperitoneal septic mischief was to me a revelation, and at the same time a stimulus to find some means of protecting the wound from infection.

In every case where the wound became infected, cutting free the superficial skin sutures was alone sufficient to check the progress of the infection.

I felt certain that in the above-mentioned cases the wound suppuration was the result of contamination by the infective material from within the abdomen, and that if one could prevent this infective material from coming

into contact with the divided and separated healthy tissues, or effectively sterilize these tissues after infection, then primary union should always take place. Within a few hours the peritoneal wound is sealed, and a re-collection may occur without wound infection. To prevent the wound from being soiled in these cases we found to be impossible, and we were compelled therefore to fall back upon the plan of wound disinfection.

In every case of primary appendicitis the damaged appendix is attacked—infected—from within its own lumen. The ever-present *Bacillus coli* finds in the devitalized organ a suitable nidus for its increased activity, and in the great majority of cases it is the predominating pus-producing organism present. Acting on this assumption, if we can by adopting any measures keep the infection from becoming a mixed one the virulence of the sepsis is lessened and the resisting power of the tissues encouraged. Hence the same precautions against the introduction of sepsis from without are as necessary as if one were dealing with an absolutely clean case. For these reasons I have been giving, either immediately before or immediately after the operation, 50 to 100 millions of a stock *Bacillus coli* vaccine, followed in ten days by a second dose, if necessary. This is given without testing the opsonic index.

Operative Procedure.

The abdomen is cleansed with spirit and painted with iodine. The gridiron incision is invariably employed—the skin, subcutaneous tissue, and aponeurosis of external oblique in one incision and at right angles to a line between the anterior superior spine and the umbilicus; the internal oblique, transversalis muscle, and fascia in a second incision at right angles to the first; and the peritoneum in a third incision in the same direction as the first. When circumstances do not demand it, why make a uniform large incision? Why divide and separate more tissue than is necessary? It means more damage to tissue and more raw surface to infect. An incision of 2 in. to 3 in. is, as a rule, ample. Having to rely upon disinfection as a means of securing primary union of the wound, we found, after experimenting with various antiseptics, that iodoform was best suited for this purpose, and was best in the form of an emulsion.

Before opening the peritoneum the emulsion is poured into the wound. This fulfils a double purpose: it brings an antiseptic into intimate contact with the freshly wounded surface, an antiseptic—iodoform—which has a particularly inhibitive effect upon *Bacillis coli* growth. The peritoneum is now opened.

The following cases might be considered in two groups; they were all acute cases—urgent cases: Group 1, where there was no localized collection of pus, and in which the appendix was gangrenous, in whole or in part, with or without perforation, and accompanied by a degree of septic peritonitis the actual extent or limit of which was unknown. Group 2, where there was a localized collection of pus shut off from the general abdominal cavity, and in which the appendix was to a varied extent in a condition of inflammatory destruction.

In Group 1, comprising five cases, four males and one female, the appendix was not shut off from the general cavity. In Cases I, II, III, IV (incipient), V (commencing) the appendix was in a condition of gangrene, and perforated in Cases I and II. Free fluid of a foul-smelling, sero-purulent character was present in the general abdominal cavity more or less in all the cases, mopped from the pelvis through the appendix wound in Case I, and through a separate suprapubic opening in Case II. The appendix was removed in each case. The emulsion in some quantity was poured into the seat of the appendix, and again into the wound, except in Case V, where biniodide and spirit were used for the wound. The gridiron wound in each case was closed without drainage.

In Group 2, comprising two cases, VI and VII, there was a localized collection of pus. The gridiron wound was treated in the same manner as in Group 1. The general cavity was protected by strips of gauze before separating the adherent bowel. The pus was carefully mopped out, the appendix removed, the resultant cavity filled with emulsion, the wound closed in layers without drainage, painted with iodine, and sealed with collodion. In Case VII there was an opening in the sheath in the iliacus muscle, about the size of a shilling piece, leading to a collection of pus in the muscle.

The Question of Drainage.

In these consecutive seven cases in which drainage would in each case have been previously adopted either by tube or by packing, a primary healing of the wound has occurred. In Case II, owing to the retro-caecal position and the amount of interference necessary to remove the appendix, I admit my faith wavered, and I made a separate opening behind, and placed a tube for forty-eight hours. This served no purpose as far as drainage was concerned, for nothing came through the tube except a little blood-stained serum. Whether these striking results are due to the vaccine or to the iodoform emulsion, or to both or to neither, I cannot say. It is interesting to consider the question of drainage in abdominal conditions from a historical point of view. Not many years ago it was the routine practice to place drainage tubes in both flanks and in the pouch of Douglas in all cases of perforative stomach and intestinal lesions. With the advent of the Fowler position the flank drainage tubes disappeared, and now the use of a suprapubic drain is considered unnecessary. I never employ now a post-operative suprapubic drain or any drain whatever in perforative stomach or intestinal cases. After mopping out the pouch of Douglas the suprapubic wound is closed.

Risks.

What risks are run by primary closure of the appendix wound when the offending organ has been efficiently removed?

1. A peritonitis which has been confined to a circumscribed area around the appendix might become general. In the cases here reported, and in others previously reported, a septic peritonitis existed at the time of the operation. It may be argued that the peritonitis was, in these cases, limited in extent, confined to the pelvis. In no case, however, did it subsequently become general. In my opinion, if the resisting powers of the tissues themselves be not sufficient to prevent extension of the peritonitis drainage will not help them.

2. Extension of the septic process may occur along the colon or into the pelvis, and a subdiaphragmatic abscess form as a result of the former and a pelvic abscess as the result of the latter. Certainly each of these conditions may happen, but each has happened when free drainage has been employed. No opinion on this point is of value until a comparison be made between the cases treated with and without drainage. The same applies to septic thrombosis and pyaemia.

3. A localized abscess may form at the appendix region itself. This could be treated as in the primary lesion. I have not yet experienced it.

4. Infection of the wound. Up to the present series this has happened in 50 per cent. of my cases, and in each case the infecting organism was *Bacillus coli*. Since the employment of vaccine and of the emulsion only a small infection occurred in one case (Case II).

The advantages of primary union are so apparent that they need not be elaborated. The possibility of subsequent hernia is reduced to a minimum. The formation of a faecal fistula is not encouraged. On this point I have no doubt whatever; when I employed a drainage tube a faecal fistula was not an uncommon complication. The fistula may not have lasted for long, but it retarded convalescence. Since I ceased employing a drainage tube no faecal fistula has occurred.

One word with regard to immediate after-treatment. I do not think it advisable to hasten the administration of a cathartic. If there is some distension or peristaltic pain a turpentine enema usually gives relief. An interval of four to seven days is best before the usual post-operative laxative is given.

Though I have in this communication advocated the abolition of the drainage tube as a routine method of procedure in all cases of operation in acute appendicitis, I freely admit that, in the words of Professor Gilbert Barling at the close of his remarks on the treatment of general septic peritonitis, we "should adopt no hard and fast line of treatment, but treat each case on its own merits." I would add, in extenuation of "early closing," my belief in the words of Professor Rutherford Morison, "that the

peritoneum has a resisting power not belonging to other tissues."

For the reports of the following cases I am indebted to my former house-surgeon, Dr. Charles Cameron, whose kindly help I heartily acknowledge.

CASE I.

W. M., male, aged 9, admitted to the Victoria Infirmary, Glasgow, on February 14th, 1912, suffering from urgent abdominal symptoms of three days' duration. Symptoms consisted of abdominal pain, at first diffuse, but settling later in the right iliac region. On morning of admission, while straining at stool, his pain became suddenly very violent, and on admission was very severe. On admission temperature was 101°; pulse 100 and very weak. Face was flushed, and tongue covered with a dirty white fur. He complained of generalized abdominal pain, most severe over McBurney's point and in right hypochondrium. Abdominal rigidity, tenderness, and hyperaesthesia were intense, especially in right iliac region.

Operation (Mr. Grant Andrew).—Usual appendix incision—gridiron—and use of iodoform emulsion. Abundant foul-smelling, sero-purulent fluid escaped. Appendix lay to the outer side of the caecum, pointing up towards the liver. It was densely adherent to caecum. Adhesions separated and appendix removed in the usual way. Sero purulent fluid was mopped out of the pelvis through the appendix wound with long strips of gauze pushed down on long forceps. More emulsion was poured into the appendix bed and into the wound, which was completely closed in layers. The appendix was perforated near the tip, and actual spurts of faecal matter were seen issuing during the operation. It was long and gangrenous, and contained four coproliths. He received after operation 50 million injection of *Bacillus coli* vaccine. Wound healed by first intention, and he was dismissed well on March 2nd, 1912—eighteen days after operation.

CASE II.

S. T., male, aged 28, admitted to the Victoria Infirmary, Glasgow, on February 23rd, 1912, with symptoms of four days' duration. On admission he was very collapsed and toxic. Temperature was 99.6°; pulse 116, small and thready. Complained of severe abdominal pain. Abdomen was distended and rigid, rigidity and tenderness being exquisite in the right iliac region.

Operation (Mr. Grant Andrew).—Usual appendix incision and emulsion. A great quantity of purulent *Bacillus coli* fluid, containing yellowish flakes of lymph, escaped. Appendix lay retrocaecally, and was densely adherent to the posterior aspect of the caecum and the posterior abdominal parietes. It was partly brought into the wound, but owing to its extreme friability it broke off and the stump was withdrawn into the abdomen. To obtain room for finding the stump the internal oblique was divided in an upward direction. In the search two coproliths were found free in the abdomen and were removed. The appendix stump was found after a long search and dealt with in the usual manner. A lateral incision was then made and a drainage tube passed in behind the caecum. The gridiron wound was completely closed in layers after fresh emulsion had been poured in. A small suprapubic incision was made and the pelvis mopped out with gauze. This wound was closed completely. One hundred million *Bacillus coli* was given immediately after operation. Tube was removed in two days' time. Very slight infection occurred at the upper angle of the gridiron wound. This closed up quickly, and did not in any way impair the strength of the wound. He was dismissed well on March 23rd, having been twenty-nine days in hospital.

CASE III.

J. G., male, aged 25, admitted to the Victoria Infirmary, Glasgow, on February 24th, 1912, with abdominal symptoms of sixty hours' duration. He had had two previous attacks of appendicitis. Very ill on admission and very toxic. Face was pale and tongue dry and furred. Temperature was 100.1°, and pulse 110 per minute. Abdominal pain was generalized, but very severe in the right iliac region, where rigidity and tenderness were exquisite.

Operation (Mr. Grant Andrew).—Usual gridiron incision and use of emulsion. Appendix lay over the external iliac artery and pointed towards the pelvic brim. Removed in the usual manner. Emulsion applied to the appendix bed and to the wound, which was completely closed in layers. Appendix was thick and gangrenous in its whole extent, with a stricture near the base. It was full of faecal matter, contained one coprolith, but was not perforated. Wound healed by first intention, and he was dismissed well on March 16th, twenty-one days after operation. Fifty million of *Bacillus coli* vaccine was given on admission.

CASE IV.

C. H., male, aged 20, admitted to the Victoria Infirmary, Glasgow, on March 16th, 1912, suffering from abdominal symptoms of thirty-six hours' duration. On admission he looked very ill. Face was flushed, skin cold, and covered with a clammy sweat. Tongue was furred. Temperature was 98.2°, and pulse 88 per minute. Abdomen was rigid and hyperaesthetic, especially in the right iliac region.

Operation (Mr. Grant Andrew).—Usual gridiron incision and use of emulsion. Appendix lay to the inner side of the caecum, coiled on itself, with tip hanging over the pelvic brim. There were numerous adhesions round the base. It was removed in the usual manner. There was no free fluid. Appendix was rough on surface, suggesting tubercle, not so microscopically. Mucous coat was very dark, suggesting incipient gangrene. There were two areas, one at the base and one at the tip, over which the coats were thin and where perforation would probably have occurred. Wound healed primarily. Dismissed April 6th, three weeks after operation. Fifty million of *Bacillus coli* was given on admission.

CASE V.

Mrs. F., aged 27, admitted to the Victoria Infirmary, Glasgow, on February 10th, 1912, suffering from abdominal symptoms of two days' duration. Abdomen was very rigid and hyperaesthetic, especially in the right iliac region. Temperature was 100.5°; pulse 104.

Operation (Mr. Grant Andrew).—No emulsion was used here, but wound was swabbed with mercury biniodide and spirit. Appendix was long and pointed towards the pelvis. It was covered with dirty green exudate, contained three coproliths, and showed commencing gangrene at the base. Wound healed perfectly by first intention; it was closed in layers without drainage. She was dismissed on March 1st, having been three weeks in hospital. Fifty million of *Bacillus coli* vaccine was given immediately after operation.

CASE VI.

Mrs. W., aged 43, admitted to the Victoria Infirmary, Glasgow, with symptoms of eight days' duration. Symptoms consisted of abdominal pain, at first diffuse but settling later in the right iliac region. The pain was accompanied by sickness but no vomiting. On admission she was very ill and toxic. A large tense, doughy, tender swelling was palpable over the appendix region. Temperature was 101.1°; pulse 100.

Operation (Mr. Grant Andrew).—Usual gridiron incision and use of emulsion. Distended caecum bulged into wound. This was pushed inwards and a gush (about 2 oz.) of thick yellow, localized *Bacillus coli* pus escaped. The cavity was mopped out. Appendix lay retrocaecally and was buried in the abscess wall. It was removed with great difficulty. Cavity was filled with iodoform emulsion and the wound was completely closed in layers. Some induration and redness of the edges of the wound formed, but this subsided and the wound healed perfectly by first intention. Fifty million of *Bacillus coli* vaccine was given on admission and again on April 8th. She was dismissed well on April 20th, having been three weeks in hospital.

CASE VII.

A. R., female, aged 41, admitted to the Victoria Infirmary, Glasgow, on April 6th, 1912, as an urgent case with history of abdominal pain and sickness of six days' duration. She was very ill on admission. Temperature was 100.5°; pulse was 104. A big mass was palpable in the appendix region.

Operation (Mr. Grant Andrew).—Usual gridiron incision and use of emulsion. Bowel was adherent to anterior abdominal wall. This was separated and pus escaped in huge quantity, particularly from a circular opening in the iliacus sheath. Appendix lay retrocaecally. It was removed in the usual way. Emulsion was poured in and the wound closed in layers and sealed with collodion. Wound healed completely by first intention. Fifty million *Bacillus coli* vaccine was given on admission and again ten days after.

REFERENCE.

1 BRITISH MEDICAL JOURNAL, October 28th, 1911.

WE have received the prospectus of a new medical index which is about to appear in monthly parts under the title of *Bibliographische Monatsschrift*. It is described as an international journal of all medical literature. It is published by the Claudius Verlag (Amandus M. F. Martens) at Wandsbeck i.-H. Each part will contain about 80 pages of printed matter, and the price will be 30 marks or 20 marks for cash. According to the prospectus, the publication will contain the titles and authors of all newly published medical books and the titles and authors of every article in the various medical journals throughout the world. The aim is to make it more complete than the *Index Medicus*, which does not include every individual article in the journals. There are two aspects from which we can regard this publication. The first is highly practical and is covered by the question, "Is there a sufficient demand for such a publication?" We have been threatened so often with the withdrawal of the *Index Medicus* on the ground that the expense of production is very heavy and can only be covered by a large subscription list, that we are somewhat sceptic as to the chances of an additional index finding sufficient supporters, even though it be fuller than the old one. The second point concerns the manner in which the material will be dealt with. Presuming that the publishers' intentions are carried out fully and every article and other publication is given in the *Monatsschrift*, the utility of the work will depend entirely on the arrangement of subjects; the mass of medical literature is so overwhelming, that unless some practical scheme of classification is adopted, the reference value would be small. If the work proves to be really what it claims to be, it will be of great use to medical men who wish to keep themselves informed about the publications on special subjects.

A Clinical Lecture
ON
EARLY DIAGNOSIS AND OPERATION IN APPENDICITIS.

DELIVERED AT THE HOSPITAL FOR WOMEN, SOHO.

BY

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THAT man must be singularly unintelligent, unobservant, or indifferent who does not draw some conclusions from phenomena which are constantly brought under his notice, so that, as one who in his practice has been dealing for many years past mainly with pelvic and abdominal diseases, I have not unnaturally formed my own opinions about so common and prevalent a condition as appendicitis, together with its treatment. As time has gone on these opinions have developed into convictions—almost, one may say, into a creed—and the sum of my convictions amounts to this: that appendicitis is so dangerous, mischievous, and treacherous a complaint if allowed to make headway that it should be attacked at once and given no chance of obtaining the upper hand. We should take the initiative, not it. It should not content us to merely act on the defensive. It is we who should take the offensive without a moment's delay. So to speak, it should be "shot at sight" as soon as recognized. The frontiersmen of Southern Argentina used to have a saying some twenty or more years ago when I lived amongst them, that an Indian was no good until he was dead, and this is what I feel about a diseased appendix, that it, too, is of no value until dead and outside the human body. Every year I become more convinced that appendicitis should never receive any quarter; there should be no parleying with it, no negotiating with it, no temporizing, no dallying, no treaty, nothing from the very first but war, literally to the knife. As a general rule, when the infection and inflammation are confined within the appendix the disease can readily be treated by operation, but when the infection has spread outside the appendix, then it is often a different matter altogether. A wild cat in a bag can be easily dealt with, but if that same wild cat is once allowed outside the bag and is rampaging around the house and garden it may do a very great deal of mischief before it is caught and exterminated, if indeed it ever is overtaken and caught; and so it is with appendicitis.

Few operations in surgery are easier of performance than appendicectomy when the appendix is free and merely the seat of a simple catarrhal inflammation, and few operative procedures are safer. The mortality in such cases ought to be, and often is, *nil* per thousand under modern conditions of operating, but when the appendix is buried in adhesions or undiscoverable in a large abscess, or black and gangrenous, or in some other condition of advanced destructive inflammation or infection, or when general peritonitis is present or threatening, how difficult and anxious operation may be is known to every operating surgeon, and the risk of such operations is known only too well to the general public.

It is this point which I wish to emphasize. The public only hear as a general rule of the unsuccessful operations. It is these that figure in the daily press; they alone arrest attention, and so operations obtain a bad reputation. Because the patient dies after, and in spite of, operation, the public are apt to think because of it *post hoc ergo propter hoc*, and that if he or she had not been operated upon probably a different result might have followed. I am well aware that in advocating early operation I am preaching no new doctrine. It seems to me that for the last ten or fifteen years operating surgeons have been like preachers calling in the wilderness, for few have heeded them. Had their advice been acted upon, death from appendicitis would be an uncommon event instead of, as now, a far too frequent occurrence. But there are two conditions which are absolutely essential to success—first, that appendicitis should be recognized early; and, secondly, that when recognized operation should be immediately resorted to.

Specialism has at the present time become necessary and indispensable owing to the vast field covered by medical activities; but it has its drawbacks, and one must admit that the different lines of treatment adopted by different practitioners, according as to whether they have a medical or surgical bias, is very often detrimental to the public interest and puzzling to the public mind. It shakes confidence in our profession when for the same complaint one practitioner recommends immediate operation and another, let us say, vibratory massage or horse serum. It is often a lottery whether a patient is operated upon or not, according as to whether he has been seen by a physician or a surgeon. The physician who does not operate is naturally unwilling to admit his inability to deal with a simple case of appendicitis; he knows that many cases, possibly most cases of a first attack, will subside; he sees them do so very often, and so he gets to think that it is not advisable to operate in every case, and that it is better to pause and see which way the case is going, or even to wait until the second or third or yet more attacks have shown that sooner or later operative measures must be adopted. A general practitioner, too, cannot afford to quarrel with his patients; he knows that to the majority of people the knife is distasteful in the extreme. He is very often told at the outset of his attendance that there must on no account be operation, and rather than lose his patient and give up the case he stands by and observes what palliative measures will do; very often he has no other alternative. He feels he has given his advice and the responsibility no longer rests with him; but if he held my views he would speak with a stronger voice, and would use all his powers of persuasion and argument to convince the patient or the friends that with an early case of appendicitis operation is a far less evil than delay. The leading features in appendicitis are its uncertainty and its insidiousness. If it were possible to endow it with personality I should consider treachery to be its leading characteristic, as with the pampas Indian just referred to, who was feared, not for his ferocity, his bravery, or his cruelty, but for his invincible treachery. In appendicitis apparently all may be going well, but within an hour a patient may be on the brink of the abyss of death. Within the shortest period the symptoms may assume so alarming a character that operation is immediately imperative, when it may have to be carried out under circumstances which are far from being ideal—in the dead of night perhaps, short-handed or otherwise handicapped, and we all know that compulsorily hurried operations do not compare favourably in their results with those deliberately planned and executed at leisure.

It is the business of insurance companies to calculate risks; every risk or chance is estimated with them to a nicety, and the premium demanded bears a definite ratio to the risk incurred. Now I would ask you what difference in premium would be required by an insurance company on the one hand from a patient who was to have his appendix removed in the earliest stage in a nursing home, hospital, or room especially prepared for an aseptic operation, performed by a skilled surgeon with picked assistants and trained nurses, after careful preparation, and on the other hand from another patient who had been running a high temperature for a week or more, who was worn out with pain and loss of sleep, whose constitutional powers had been enfeebled and his system poisoned, and who had suddenly taken such a turn for the worse, in popular parlance, that immediate operation offered the only chance of recovery? I imagine the difference in premium demanded would be considerable.

As most people are more convinced by concrete example than by abstract expressions of opinion, I will now instance one or two cases illustrating the unwisdom of delaying operation.

Some years ago a lady, who was a guest in my house, had a mild but clear and unmistakable attack of appendicitis. She quickly diagnosed her own case, and asked if I would operate. However, the fact of her being my guest and the attack not being a severe one made me hesitate. In a few days she had recovered, and I sent her to consult a friend of mine, an eminent abdominal surgeon. He did not take my view of the case at all, and, after a somewhat cursory examination, gave the patient to under-

stand that she was suffering from nothing but an attack of nerves, of which doubtless she had her share. However, in less than a month she had another attack similar to the first. She was away from London then, and consulted a surgeon in the North. He advised operation. She readily acquiesced, and it was performed. The appendix was found lying in a small abscess; it was removed, and the abscess drained by a tube. The tube in due course was removed and the wound healed, naturally after a longer period than if operation had been performed during the first attack before the formation of pus. Well, you will say, this was all right; she had her desired operation, the diagnosis was made more certain, and a good recovery resulted. Now for the sequel. A year or so later a hernia developed in the scar, as it so often will where a tube has remained for some days. A truss was prescribed, and all went well for a time, until one evening the hernia became strangulated, as herniae sometimes do, in spite of trusses. This entailed a somewhat hasty operation; the patient recovered, it is true, but had not too much to spare. It was what is called "a near thing." She was not strong, nor a good subject for operation. Now, I ask frankly, Would it not have been much better for the patient if she had been operated upon within twenty-four hours of the first attack? There would then have been no tube, no abscess, no hernia, no strangulation. The mistake in the first case, I admit, was mine. I spare myself no criticism. I wish to give the reasons for the faith that is in me. Here is another of my mistakes.

Some two or three years ago Dr. Noel Bell of Clapham asked me to meet him one day in consultation over an old gentleman whom he considered to have an attack of appendicitis. I did so. I quite agreed with the diagnosis; but as the patient was between 60 and 70 years of age, exceedingly stout, and altogether by no means an ideal case for operation, I suggested that the attack would probably settle down, and that possibly he might not have another, but die of something else meanwhile, and that I would try in his case the expectant line of treatment. About a fortnight later I received another telephone message saying that all had gone on apparently well until within the last day or two, when he had become very much worse, and Dr. Bell felt sure that something now would have to be done, as there was a decided fullness in the right iliac fossa. Again I went down, and this time arranged for operation within a few hours. The patient refused to leave his home and was in no condition to be moved. The operation was difficult, the light bad, the room small, the patient extremely obese, as remarked before, the ideal aseptic conditions one desires for operation conspicuously absent. On opening the abdomen by McBurney's method the intestines were found to be firmly adherent everywhere both to themselves and to the abdominal wall. Peritonitis had been in progress for a fortnight. In separating the adhesions and trying to find the appendix or the abscess a large hole was made in a loop of intestine, and had to be sewn up. When at last the abscess was reached a pint or more of foul pus was evacuated, and a full-sized drainage tube inserted. I was content with this, and made no search for the appendix. Well, for some time the fate of that patient hung in the balance, but he was ably nursed and most skilfully looked after, and eventually after many weeks he completely recovered; but is there any one who does not think that it would have been safer and better had I operated upon him a fortnight before, when I first saw him?

Yet another case where my delay subjected the patient to more risk than I anticipated, although here again, as it happened, all went well.

An Oxford undergraduate, a relative of mine, about a couple of weeks before going up for his "finals," was suddenly seized with abdominal pain one morning after breakfast. Dr. Turnbull saw him, diagnosed appendicitis, and he was removed to the Acland Nursing Home. Mr. Dodds Parker saw him as a second opinion, and an operation was arranged for 9 o'clock that evening. His mother went up at once to see him and telegraphed for me. Upon arrival, I found the temperature and pulse normal, only slight tenderness over the appendix, and the patient quite comfortable. It seemed to me that, in view of the close proximity of his examination and the extreme mildness of the attack, operation that evening was not imperative, and I said so, and in consequence it was postponed until next morning. He had a good night and the next day felt in his normal health. The squall had apparently blown over, so, after a few days in bed, he left the nursing home, and in due course stood for his final examination. When that was over, he came up to London to Fitzroy House, and was operated upon by me, but for two or three weeks previously to operation he had not been feeling quite well nor comfortable in the abdomen, and on pressure there was always some tenderness over the appendix. The operation presented no difficulty. The incision was made over McBurney's point, by the muscle-splitting method, but the appendix, though free, was large, swollen, congested, and distended with pus. Obviously the patient had been walking about for some while with his appendix in this dangerous condition. Note that there was no rise of temperature to give us any hint or clue to the appendicular condition. The temperature had been regularly taken since the first attack. The patient made an uninterrupted and complete recovery, but my postponement of operation had subjected him to grave risk, which he had been spared if the operation had been performed the first day he was taken ill, as the other medical men advised.

Curiously enough, the resident medical officer of the Hospital for Women rang me up a few evenings ago while I was writing these notes, saying that he had just admitted a patient, evidently very ill, and that he thought she had acute appendicitis, and would like me to see her. A taxi quickly took me to the hospital. The patient was a woman of 22, the wife of a publican, enormously fat, weighing perhaps 18 st., with an abdomen more like a feather bed or gigantic pillow than a stomach; temperature 103.4° F., pulse 134, no abdominal movements at all, recti quite rigid, everywhere very tender, but the greatest tenderness over the appendix region; the liver dullness absent; the whole abdomen exceedingly tympanitic. It was a typical case of what is known as the acute abdomen. One thought of ruptured gastric ulcer and acute pancreatitis, as well as of appendicitis. I asked one of my colleagues kindly to see her with me, and we agreed that the appendix should be first explored. The history was that less than thirty-six hours before the patient was apparently in her usual health, but while carrying a tray at 1 o'clock the previous day she was seized with severe abdominal pain most pronounced above the umbilicus under the costal arch; her doctor at first considered it to be an attack of acute dyspepsia, but next day, recognizing the gravity of her case and diagnosing appendicitis, telephoned to the hospital and sent her up. It was obviously no case that could be postponed until next morning, so about an hour or so later we operated. I made an incision through the right semilunar line. As soon as the peritoneal cavity was opened a large quantity of thin, malodorous pus escaped under high pressure. There were no intestinal adhesions, the pus was free in the abdominal cavity, but the appendix itself was firmly glued down behind the caecum, and was separated with difficulty. It was abnormally large and long, and contained a hard concretion as large as an almond at its extremity. Subsequently our pathologist, Dr. Paramore, reported it to be gangrenous. It was removed as rapidly as possible and the abdomen mopped dry. There were some pints of thin free pus. Large drainage tubes were inserted, one into Douglas's pouch and another to drain the right flank. They were surrounded with gauze packing, and a gauze drain was put down to the stump of the appendix. The best method, in my opinion, of draining these cases is by a large tube, $\frac{3}{4}$ in. diameter with many perforations, extending from above the pubes, through Douglas's pouch, and out by the vagina. Such a tube was not available in this case. The patient was returned to bed, given continuous rectal saline injections, and kept in the Fowler position, but although the bowels acted and she took her food, yet death ensued on the fifth day from toxaemia. Several large pockets of pus, pent up amongst coils of intestine, were found *post mortem*. The general septic peritonitis present at operation had not been arrested. It had had too great a start. Although no time whatever was lost in hospital, yet operation came too late.

The attack in this case was truly of the fulminating variety. It came on almost literally with the suddenness of a thunder clap; the patient was well at 1 p.m. one day, moribund less than thirty hours afterwards, and the attack

commenced not openly as frank appendicitis but under the guise of acute dyspepsia or gastritis. Too often, like the ghost in *Hamlet*, appendicitis comes in questionable shape. To meet such desperate surgical conflagrations as this we have to be as ever ready as the fire brigade. In this case the mischief had probably been smouldering unknown to the patient for some while. I readily call to mind two cases of such smouldering appendicitis in eminent medical men of my acquaintance. Both were aware of their trouble, but both kept postponing operation, well knowing the risk of so doing. One has since had his appendix excised and congratulates himself on the fact. The other left it till too late, and one day had a fulminating attack of appendicitis similar to the case just related, and met a similar fate to hers. We all remember the famous speech of Brutus commencing, "There is a tide in the affairs of men." To nothing was it ever more applicable than to this complaint.

Here is another case illustrating both the difficult position the general practitioner is often placed in and the danger of delay in operation. One Sunday last year I received a telephonic message from a doctor in the north of London to meet him in consultation as quickly as I could, as a young lady he had been treating for some few days for appendicitis had become distinctly worse, and he was very anxious about her. Upon my arrival, before seeing the family, he told me that I must on no account mention operation; that he had done so from the first, and had nearly lost the attendance on the case, as the parents would not hear of it and were very annoyed, but that his patient was in a bad way, and he did not know what to do. I found her flushed, pulse 165, temperature 104.5°, tongue dry and coated, the abdomen distended, exquisitely tender, but it was hard to say that there was more tenderness on the right side than on the left, because everywhere was tender, but the right rectus was very rigid. It was obvious that unless something was quickly done it would not be worth while doing anything at all; general peritonitis was rapidly supervening—in fact, had commenced. I told the parents that only immediate operation gave the patient any chance, and, my opinion being backed up by their own medical adviser, they reluctantly consented. Within two hours we commenced operation, and found the appendix, black and gangrenous, lying in a foul abscess. It was removed and the abscess drained, but for a week subsequently one could not consider the patient out of danger. She eventually made an excellent recovery, but it was many weeks before the drainage tube could be removed and before the sinus containing it had closed. The illness in this case was an affair of months rather than of two or three weeks, as it would have been if operation had taken place upon the first sign of the appendix being inflamed.

About the same time I also assisted one of my colleagues in a private case, also in a young lady, where operation had been delayed, I think, for nearly a fortnight. In this case also there was an abscess; then drainage tube, one or two operations subsequently, a prolonged convalescence, and even now I hear a sinus persists, six months or more afterwards.

Mr. Dodds Parker showed in the *Lancet* a short time ago how frequently, in those cases in which all that could be done at the time of operation was to open the abscess and drain it and not remove the appendix, the appendix remaining in the body still persisted as a source of danger to the patient. It is evident that the mere opening and draining of an appendix abscess is an incomplete operation, and must not be considered as final, nor the patient as cured and secure from further attacks. A further argument in favour of early operation, which is safe, simple, and final.

A few years ago a lady called upon me and told me she thought her son had just had a mild attack of appendicitis, but that it was of a most transitory nature and so slight that they hardly knew whether it was true appendicitis or not. Still she was anxious about him, and as he was about to go out to Uganda, she asked, supposing her son would consent, if I would be willing to excise his appendix. I replied that under the circumstances I considered I should be justified in doing so. However, the patient thought otherwise and no operation took place. Whilst in Uganda the appendix gave no trouble, but this young man, being somewhat of a rolling stone, some while later found himself in British Columbia, and there he had an attack of appendicitis which very nearly cost him his life. In this last attack he had to be carried down to the coast and operated upon there after some days' delay; an abscess had formed and he had a long and weary convalescence. How infinitely less would the risk of operation have been had the appendix been excised in the first instance before he left this country!

Yet one more case. A gentleman, a member of the Stock Exchange, consulted me for occasional attacks of right-sided abdominal pain. He himself thought it was his liver that was out of order. I saw him once or twice, and after a while told him I thought he was suffering from appendicular colic, and advised him to go into a nursing home. This he did; I watched him for a few days and quite made up my mind that his appendix was diseased. I told him so, and that the wisest thing, in my opinion, would be for him to have it removed. However, as he felt better he left the home, saying the rest and treatment had done him a world of good and he would see what happened. Now for the sequel, which I heard at second-hand. This gentleman was staying at a country house where, luckily for him, an eminent surgeon happened to be a guest at the same time. There he had a definite attack of appendicitis. The surgeon aforesaid acted with promptitude, took the patient up to town by motor car, and operated upon him the same evening in a nursing home. Well, all this was more dramatic and thrilling, partook more of the nature of an adventure, called for more sympathy, evoked more interest, but I think that every one will agree with me that this latter procedure was more risky than if the patient had been operated upon when he was quietly resting in a nursing home on the first occasion; and one must never forget that if operation is submitted to early all the pain and vexation of later attacks are avoided, and this in itself to busy men and women is a consideration of some value.

These few cases that I have recited are examples of the unwisdom of delay in operating. They are but types of too many that I have come across, and of nothing am I more convinced than that hesitation to resort to operation in every case of appendicitis without exception is fraught with risk, very often with the gravest risk. Last year the public read with sorrow of the death of two young noblemen after operation for appendicitis. It was, however, common knowledge that neither of these boys was operated upon within twenty-four hours of the first attack, but after several days' delay. The general public, in estimating the value of operation, does not weigh this most important fact; but without wishing in any way to criticize or to pass judgement upon the actions of others, nothing will convince me but that those boys, had they been operated upon within twenty-four hours of the first onset of symptoms, would be alive to-day. What operating surgeon of any experience but does not agree with me? To the physician and to the general practitioner who do not see the necessity for operating in all cases, I would remark that it is quite possible to cross the Atlantic in a cranky ship, to walk on thin ice without coming to grief, but that if one wishes not to run risks and take chances one avoids doing these things; and where human life is concerned, especially when we are the advisers in such cases as appendicitis, it behoves us to subject our patients to no more risks than are necessary. How bright the picture is when patients are operated upon within twenty-four hours or less of their first attack every one knows. I could quote them by the score, but these cases are so uneventful as to be uninteresting. The operation is easy, the convalescence perfect and uninterrupted; boredom from enforced idleness in bed is the only drawback.

I am not suggesting that every case of stomach-ache should be treated by operation—far from it. We are medical men, and our training should fit us to make a more accurate diagnosis. The pendulum often swings from one extreme to the other. A few years ago the appendix was removed so frequently in America that it was said that no lady could pretend to be a woman of fashion unless she had either been through the divorce court or had had her appendix removed. Remember *in medio tutissimus ibis* in this as in all things. My contention is that when the diagnosis has been made, recourse to operation should follow as surely as the night the day, and appendicitis is what every medical man should be constantly on the look-out for; 90 per cent. of all acute abdominal emergencies are

due to mischief in the appendix. It is infinitely commoner than ruptured gastric ulcer, acute pancreatitis, impacted gall stones, or strangulated bowel. Remember that the pain in the first instance is not always localized to the appendix region, but may be referred to the umbilicus or elsewhere in the abdomen. There may be nausea, there may be rise of temperature and accelerated pulse, but there nearly always is as a constant symptom tense rigidity of the right rectus. This, to my mind, is the key to the situation. It is Nature's effort to protect a sick appendix. This rigidity in conjunction with two or more of the recognized classical symptoms should make diagnosis no very difficult matter. In women it is not always easy to differentiate chronic appendicitis from chronic right tubal or ovarian mischief, but these are chronic cases, and careful examination per abdomen and per vaginam may help one, but I have seen several cases where even at the time of operation, and subsequently by pathological examination, it was quite impossible to say whether the appendix or the right tube and ovary were first affected. Both appendix and tube have been matted together, both inflamed and involved in a similar infective process. It is safe, perhaps, to conclude that if the opposite tube is normal the mischief arose in the appendix, but if both tubes are the seat of pyosalpinx or salpingitis then it is probable that the appendix became involved secondarily, but to enter into this question is beyond the scope of this paper. It has been said that he gives twice over who gives quickly, and I am sure that that surgeon confers a double benefit upon his patient who operates quickly as soon as appendicitis is diagnosed: I shall be amply repaid if anything I have said will add by ever so little to the accumulating weight of evidence in favour of early operation in this disease.

CASES OF PERFORATIONS OF THE STOMACH AND DUODENUM.

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THIRD SURGEON, GENERAL HOSPITAL, COLOMBO.

Although the four cases here reported are none of them complete as regards their histories, yet I think each presents some feature worth attention.

Two are cases of perforated gastric ulcers in men aged 45 and 40 respectively; one is a perforated ulcer of the duodenum in a woman aged 37, and one is a traumatic perforation of the stomach in a boy aged 10. The latter was interesting from the fact that although the perforated stomach was for about nine hours full of rice and curry, yet no leakage occurred. I omit this case in the following general considerations:

The three cases of perforated ulcers came in as abdominal emergencies so far advanced that operation, though undertaken, was little more than a forlorn hope, especially in Cases I and III, where interference perhaps only served to precipitate otherwise certain calamity.

In Case II, although two perforated ulcers existed, only one was detected at operation; but I doubt that, even if both had been dealt with, death would have been prevented, owing to the involvement of the ascending colon in an extensive gangrenous process. However, this case proves the necessity of a careful examination for two or more perforated points, which has occurred in as many as 20 per cent. of the recorded cases of gastric ulcer (Mayo Robson).

Only in Case II was there any clue to a correct diagnosis as to the cause of the peritonitis; and here, too, the clinical picture was clouded by signs of appendicitis—a complication more usually associated with perforated duodenal than with gastric ulcers.

The apertures were all on the anterior surfaces, two close to the lesser curvature, one close to the greater. Here the common rule of perforation was not transgressed. For although the location of peptic ulcers is much less frequent in the anterior wall (being commonly situate on the posterior wall of the pyloric end, at or near the lesser curvature), yet the chances of perforation of an ulcer of the anterior wall are 5 to 1 in its favour, owing to mobility which prevents adhesions (Kemp).

In all the cases the ulcers were of the chronic indurated variety; Case II was complicated by a subacute perforation as well.

Sex and Age.—Perforation of duodenal ulcers is more frequent in men (10 to 1, Eisendrath). My case occurred in a woman 37 years of age. Perforated gastric ulcers are more frequent in women (4 to 1, Eisendrath). Robson states that five-sixths of the perforations of gastric ulcers occur in women, but perforation is *relatively* more frequent in men, especially in men over 40. The two gastric perforations here reported occurred in men of 40 and 45 respectively. In the British Medical Journal of February 17th, 1912, Moynihan makes the following statement: "The disclosures upon the operation table prove that duodenal ulcer is decidedly commoner than gastric ulcer. The ratio is probably about 5 to 1."

Complications.—General peritonitis in all my cases—a gangrenous colon in one, with extensive perigastric adhesions; although free gas was present in the peritoneal cavity of two of the cases, I did not observe subcutaneous emphysema in any. Case II presented extensive perigastric adhesions which bade fair to avert death had not a second subacute rupture supervened.

Case I.—*Perforated Chronic Gastric Ulcer.*

J. S., 45, male, Cingalese coolie, came walking into hospital one morning, and was not seen by me until four and a half hours later, when I found him lying in bed profoundly ill. He presented the following symptoms: Restlessness and an anxiety of expression which asserted itself in spite of the drowsiness and apathy which seemed to overcome him. His pulse was imperceptible and his breathing thoracic. He was intolerant both of questions and physical examination. All I could obtain as regards his previous history was that he had asserted on admission that he was an opium eater and had partaken of a quantity of this drug to allay the pain he experienced in his abdomen. This circumstance, although it gave him the energy to walk into hospital, tended to obscure considerably the symptoms of the case and to entail a delayed diagnosis of abdominal emergency on the part of those in immediate attendance. Even when I saw him, drowsiness and apathy coexisted with anxiety of expression, a paradoxical grouping which I was at first at a loss to explain. Whether or no the opium habit was initiated by the pain of chronic gastric ulcer I was unable to determine. The abdomen was uniformly tender and distended, the flanks were dull. No specially painful or tender area could be determined. The bowels had not moved for four days, but responded slightly to an enema of soap, castor oil, and turpentine. Vomited four times since admission. Liver dullness diminished. Duration of illness was said to be three days, although what precisely this term implied was not clear.

Operation.—As a forlorn hope (which, perhaps, would more justifiably have been abandoned owing to the patient's moribund condition) I undertook operation. Air escaped with a rush as soon as I opened into the peritoneal cavity, which was found full of purulent fluid. This was swabbed out and irrigated with warm saline as quickly as possible, and suprapubic and loin drainage established. To look for the causative lesion was hopeless, owing to the patient's condition, and I had at this stage to relinquish the operation, which had not taken more than fifteen minutes. The patient expired a few minutes later.

Post-mortem Examination.—There was an ovoid perforation on the anterior wall of the stomach half an inch from the lesser curvature and pyloric sphincter respectively. The perforation was found to occupy the

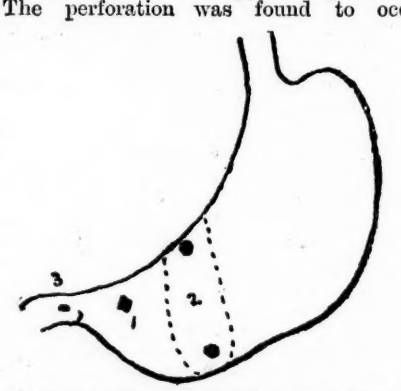

Diagram to illustrate sites of perforation. The figures 1, 2, and 3 correspond to the cases to which they refer.

expanded extremity of the anterior limb of a saddle-shaped chronic ulcer with markedly indurated edges. The ulcer rode the lesser curvature quite close up to the pyloric sphincter, and braced up the first part of the duodenum by adhesions.

CASE II.—*Perforated Chronic and Subacute Gastric Ulcers.*

W., 40, male, Cingalese, was admitted with a history of pain in the abdomen for the last six months. The present illness was of six days' duration, during which time the patient had experienced increasing pain and discomfort. No vomiting.

Present Condition.—Abdomen distended, tympanitic, and tender. Both pain and tenderness were specially marked down the right side of the abdomen and in the epigastric region to the right of the middle line; this was also the case with rigidity. Liver dullness normal. Right flank dull; left tympanitic. Expression anxious. Tongue glazed. Pulse rapid and feeble, 154 per minute. Breathing thoracic. Scanty response to soap and castor-oil enema.

The symptoms referable to the stomach (pain aggravated soon after ingestion of food and relieved on vomiting, etc.) and the site of tenderness and rigidity enabled me to come to a diagnosis of perforated ulcer of the stomach rather than one of the duodenum, although symptoms simulating appendicitis more often accompany perforations of the duodenum. Against appendicitis were the facts that the rigidity was not confined to the right iliac fossa and its environment, but encroached significantly on the epigastric region; added to this was the history of marked digestive disturbance.

Operation.—An incision was made through the right rectus, and disclosed at the very outset dense adhesions between the stomach, liver, colon, and small intestines, disfiguring considerably their normal relations. On cautiously separating the more superficial and tractable of these, gas was heard to escape, and a large opening was found high up and far back against the under-surface of the liver to which its edges were firmly fixed. No attempt was made to close this opening for fear of breaking through adhesions which seemed to shut out the general peritoneal cavity. A drainage tube was inserted into the stomach through the perforation and brought out at the abdominal wound to which it was fixed. The area round the perforation and tube was packed with gauze and a suprapubic drain inserted. The patient expired ten hours after operation.

Post-mortem Examination.—Dense adhesions of stomach to liver, colon, small intestine, and pancreas. Two perforated ulcers were found: (1) Chronic perforated ulcer with indurated edges and dense adhesions to under-surface of liver; situated on the lesser curvature midway between cardia and pylorus. The floor of the ulcer was partially formed by the liver and pancreas about their tuber omentale. It admitted the index finger. This was the ulcer into which I had introduced the drainage tube. (2) A subacute perforated ulcer, admitting index finger, situated on anterior stomach wall in the lower segment of the antrum pylori about 1 in. from the greater curvature. This ulcer was subacute in type, presented no indurated edges or stable adhesions, was the ulcer which I failed to detect at operation, and was, I have no doubt, responsible for extravasation down the colon, and death.

The extravasated stomach contents were shut in by adhesions which limited them to the epigastric region except for a leakage which had tracked down to the right kidney pouch of Morrison, and thence down the ascending colon to the region of the caecum; both the latter were gangrenous, putrid, and perforated, and were responsible for the tenderness and rigidity simulating appendicitis. The appendix itself was neither inflamed nor adherent.

CASE III.—*Perforated Duodenal Ulcer.*

S., 37, female, Tamil, was admitted in an exceedingly serious condition. The pulse was quick, feeble, and scarcely perceptible. The extremities were cold; facial expression very anxious; respirations hurried and thoracic; temperature 98°; vomiting not present. The abdomen was rigid and tender all over; when asked to show painful and tender area, she passed her hand above, below, and around the umbilicus.

I was only able to gather the following meagre previous history: Duration of illness two days; the onset did not appear to be strikingly sudden. No previous history of gastric pain or dyspeptic symptoms. Pronounced constipation, not relieved by enema.

In view of the general tenderness, rigidity, and pain, and the absence of a definite localizing sign or symptom, I could arrive at no definite diagnosis as to the cause of the peritonitis.

Operation.—I made a subumbilical median incision and encountered, free in the peritoneal cavity, a large quantity of grumous bile-stained fluid redolent of a native decoction of offensive odour called a "Kassaye." There was some plastic peritonitis and lymph flakes were adherent to coils of intestine. The omentum was invisible. I next explored the stomach by an incision through the right rectus and found the omentum tucked away and adherent in the direction of the pylorus and duodenum. The omentum was easily dislodged, and a perforation about ¼ in. in diameter was noticed on the anterior surface of the duodenum about ¾ in. from the pylorus, and through it bile-stained fluid and gas escaped. The tissues round the perforation were much indurated and tore through when I began suturing; however, with great care I succeeded in placing a continuous Lembert in the direction of the long axis of the gut, doubling in the edges of the perforation. On this an omental graft was secured. The patient was in a bad way, and I was constrained to mop up quickly the extravasated contents of the stomach, to insert drains into the pouch of Douglas and the vicinity of the perforation, and to close the greater part of the abdominal wounds. The operation lasted twenty minutes. The patient succumbed one hour after operation. Saline proctoclysis, adrenalin, and stimulants proved of no avail.

Post-mortem Examination.—Perforation on anterior wall of the duodenum. Looked at from inside (see illustration) the ulcer presented the appearance of a longitudinal fissure situated in the midst of an elevated and indurated ridge which not only encroached on, but also extended across the pyloric sphincter. In this connexion W. J. Mayo's finding that often pyloric ulcers are found to have their origin in the duodenum and differentiation between the two is difficult, is of interest.

CASE IV.—*Traumatic Perforation of the Stomach.*

J., 10, male, Cingalese, came in with an oblique wound in the epigastrium, said to be the result of an accidental impalement on a stick which he happened to be carrying in his hand, and on which he fell over whilst running. His appearance gave not the slightest clue to a severe abdominal injury. However, as the wound was penetrating, I had the patient anaesthetized for exploration.

Operation.—At the inception of anaesthesia a large quantity of undigested rice was vomited, which I afterwards ascertained he had partaken of just before the accident occurred. I did not wash out his stomach for obvious reasons. The wound was enlarged upwards, and on exploration with the finger I found it enter easily into an opening in the anterior wall of the stomach a little above the attachment of the great omentum. The abdominal and stomach wounds did not correspond in position, the former being placed at a higher level, owing to the oblique direction of the injury. *There was not the slightest trace of leakage of the stomach contents*, although the stomach had received a large meal of rice and curry just before the receipt of the injury, and had remained full until a few minutes prior to operation.

The opening in the stomach was carefully closed by a double row of sutures, and a cigarette drain was inserted down to it. The greater part of the abdominal wound was closed—at the time I did not think further interference indicated. Twelve hours later, however, when tympanitis began to appear, I made a suprapubic incision, and removed a small quantity of clotted blood which had gravitated down to the pouch of Douglas. The pelvis was drained, and saline proctoclysis administered. Evening temperature, 102°. The next day it came down to 99°, and from that time onward convalescence was uninterrupted, and the patient made a good recovery.

The most feasible explanation I can offer for the absence of escape of the contents of the stomach through a hole which admitted the index finger easily is that the rice was welded into a plastic coherent mass; also, owing to the obliquity of the wound, the aperture was perhaps valvular. The meal had been taken ten hours before the operation, and had apparently remained in the stomach for that time; whether Nature had suspended gastric motility and function as a means of protection is a point open to speculation.

RUPTURE OF THE ABDOMINAL WALL, POST-OPERATIVE AND SPONTANEOUS.

BY

A. G. STEWART, M.A., M.D.ABER.,

ASSISTANT MEDICAL SUPERINTENDENT, PADDINGTON INFIRMARY.

RUPTURE of the abdominal wall is a post-operative sequel of which little mention is made in the textbooks of surgery, although it is not a very rare occurrence. I refer to the cases in which the approximated edges of the abdominal wound completely separate, and the intestines are extruded through the opening, not to the common presentation of a knuckle of bowel after removal of a drainage tube.

It is most commonly found after suppuration, and frequently after a stitch abscess which burrows amongst the muscles. It would appear that the omentum, in addition to its many other uses, tends to prevent such an accident. In a series of experiments on cats, Wilkie[1] found that when sepsis developed after abdominal operations, 5 per cent. died from rupture and prolapse of the viscera; where, however, he had removed the omentum, 85 per cent. died from prolapse. He therefore advises that when an abdominal wound has been exposed to infection the omentum should be spread out behind it before suturing up the abdominal wall.

Other causes are too early removal of stitches, and too great hurry in getting the patient up after operation. Sir Alfred Pearce Gould[2] has drawn attention to this latter danger, and has pointed out that the integrity of the abdominal wall cannot be judged by the mere appearance of the skin union. In one case I saw the prolapse occurred about half an hour after the removal of the stitches on the tenth day, although at the time of removal the union was apparently firm. It is rather surprising that in nine cases which I have come across the accident has usually occurred in the second week, and not in the days immediately following operation, the average being on the tenth day.

It frequently occurs in stout individuals with much subcutaneous fat (one of the cases being in a woman of 18 stones), and in those debilitated, for example, by carcinoma. Straining for any reason, such as post-operative vomiting or bronchitis, tends to favour the accident, while, lastly, the use of catgut as an abdominal suture has been said to favour its production.

As regards the usual site, in one case the incision was through the right rectus in a gall-bladder operation, in another in the middle line above the umbilicus, while in the remaining seven it was in the middle line below the umbilicus.

In all 9 cases secondary suture was done as soon as possible under general anaesthesia. Of the 9, 6 recovered and 3 died.

Spontaneous rupture of the abdominal wall is a very rare occurrence, and I have been unable to discover any similar case to the one I now report.

E. H., aged 74, an inmate of Paddington Workhouse, had a severe attack of coughing on the afternoon of June 15th, 1911. A few hours later she complained of feeling faint, and I was called to see her. She had been put to bed, and I found her underclothing drenched with blood, and several coils of small intestine and omentum protruding through a wound about 2 in. in length in the middle line, rather nearer the umbilicus than the pubis. Bleeding was proceeding from a wound in the mesentery.

I had her transferred immediately to the infirmary, and anaesthetized her with C.E. mixture. It was interesting to note that peristalsis, which was exceedingly active in the extruded coils of intestine, came to a complete standstill during the administration of the anaesthetic. A piece of omentum was ligatured and cut off; the rent in the mesentery, which was about 3 in. long and at right angles to the long axis of the bowel, ran close up to but did not involve the bowel, and was closed by a continuous catgut suture, which checked the haemorrhage. The intestines were washed with warm saline, and easily replaced after slightly enlarging the opening in the abdominal wall. The linea alba was very thin and broadened out, the opening being exactly in the middle line. The recti were widely separated, their inner edges being about 5 in. apart, and as the patient was rather collapsed I made no attempt to approximate them, but closed the abdomen by superficial and relaxation sutures, after removing some redundant skin.

The patient made an uninterrupted recovery; her temperature once registered 99° F. but otherwise remained normal, and the wound healed by first intention. She got up on the twenty-first day, wearing a support made by the sister of the ward, and was discharged on August 9th.

The patient had had only one child; she suffered from ventral hernia, for which she had formerly worn a truss, but had discarded it many years ago. No sign of a scar could be made out, but the skin of the abdominal wall was very flaccid. Since her discharge she has enjoyed good health and performed light household duties. On examination on April 15th of this year the interval between the lower part of the recti was found to be almost circular, the vertical diameter of the ring measuring 5½ in., and the lateral 5 in.

I am indebted to the Medical Superintendent, Dr. M. F. Squire, for permission to publish the case of E. H.

REFERENCES.
[1] BRITISH MEDICAL JOURNAL, October 28th, 1911, page 1103. [2] Ibid., December 9th, 1911, page 1517.

DR. ALFRED GREENWOOD, M.O.H. Blackburn, and Dr. J. T. C. Nash, Medical Officer for Norfolk, have been elected Fellows of the Royal Sanitary Institute.

A MEETING to form a South London branch of the Social Welfare Association is to be held at the Horns Assembly Rooms, Kennington Park Road, S.E., on June 3rd, under the chairmanship of the Bishop of Southwark. One of the objects in view is stated to be to promote the health of the industrial community by securing effective administration of the health provisions of the National Insurance Act.

STRANGULATED OMENTAL HERNIA WITH FEW SYMPTOMS:

REPORT ON THE SPECIMEN FROM MR. A. Z. C. CRESSY'S CASE.

BY RUSHTON PARKER, M.B., B.S., F.R.C.S.,
PROFESSOR OF SURGERY IN THE UNIVERSITY OF LIVERPOOL.

THIS important and instructive case was related by Mr. Cressy in this JOURNAL on November 5th, 1910. A comment by me appeared on November 12th, and Mr. Cressy's reply on November 19th. In order to form for myself a clear idea of the nature of his specimen I asked him to let me see it, which he promptly and very kindly did. He has also given me permission to publish this report of the same. I found it mounted in first-rate museum fashion, and had it photographed on both sides, while immersed in spirit in a bowl.

The soft unaltered omentum is quite a small portion of the preparation, shown in the upper part of the plate in the form of a narrow tail, of which the free end is that cut from the colon. The rest of the omental mass is swollen, firm, and rounded for the most part, having its surfaces seamed with cicatrices almost everywhere.

The specimen had lost colour during nine months, as he stated, and on coming into my hands the liquid in the jar had already a red tint, which deepened after a few days in the warm room in which I kept it. Having Mr. Cressy's permission, I cut out a wedge and then had the specimen photographed again, showing in the plate the wedge lying loose on the tail and the hole from which it was cut. The dark colour of both gives some idea of the deep purple, almost black, colour of the inside as still existing. That of the outside is already faded.

This deep blackish appearance is due to effusion of blood, tightly distending the greater part of the omental mass, and evidently, as Mr. Cressy says, spreading upwards into the abdomen, but prevented from becoming more diffuse by the inelastic scarred omental surface. Such scarring is not uncommon in old omental herniae, but the degree here is unusual.

Microscopical examination of the wedge shows everywhere closely packed red blood corpuscles with white corpuscles in varying minor proportion, but no atrophy or other change in the tissues, and nothing compatible with either gangrene or inflammation.

The lower edge of the specimen already unfolded by Mr. Cressy and spread out below his horizontal glass rod shows the part that was confined in the hernial sac, the main lump having been the "hard mass extending as far as the middle line like a sausage." (November 5th, p. 1401.)

Remarks.—It is evident from the statement in my letter of November 12th, 1910, p. 1562, and from this report, that the case presents itself to me in two aspects—(1) the clinical emergency, and (2) the significance of the pathological anatomy.

1. I have already spoken definitely in approval of the prompt and effectual way in which the emergency was dealt with. When surgeons undertake emergencies of the kind they cannot always correctly foretell what they are to find. In any case, in hernia a good old rule is: "When in doubt, operate." But Mr. Cressy was not in doubt. He was certain that operation was required, and he was right. Our operations are often right even when the motives differ. Yet even here the motive was the only one possible—namely, to deal with an unreduced hernia in which were present some of the symptoms that may attend so-called "strangulated omental hernia." No prudent surgeon would have refrained. But inside he found something quite unexpected. One of the charms of surgical practice, to those who view it with artistic interest, is the frequency with which "the unexpected happens." He was astonished, very justly, at the black omental mass he found; but that did not prevent him from finishing his operation in first-rate style; and of course his patient got well.

2. Where I do not see my way to agree with him is in the significance of the pathological anatomy. The blackness truly spreads inwards from the stricture at the neck of the sac to the far end of the lump within the peritoneum; and if the condition *had* been one of "gangrene,"

it is clear that it did "*not stop at the stricture, but passed on into the abdomen.*"

Now I have satisfied myself and endeavoured to make clear that the condition was *not* one of gangrene, but a state of haemorrhagic engorgement of omental substance, which assumed the firm sausage-like shape by reason of the cicatricial toughness of its peritoneal covering, the inner fatty constituent being soft and easily permeable by the effused blood.

We do not know how the haemorrhage occurred in the omentum of the hernia. Possibly the exertions of the cabman may account for it. He did nothing, however, as I am informed, to aggravate the condition during the two days before operation, but lay quietly at home. The fact remains that the mass removed was nearly black at first, lost colour after a time in the preserving liquid, which became red in consequence, and is now engorged with nothing but blood, recognizable by the naked eye and certified by microscopical examination, of which the slides show well also in a lantern, but the microphotographic prints have not come out in recognizable form.

I have sent prints of all the photographs, including that of the microscopic slide, to Mr. Cressy, but the annexed plate is sufficient for the present purpose. The

Specimen of omentum removed in herniotomy. The lower edge was crumpled up in the sac; here straightened out on glass rod sewn to it. The rest of the horizontal portion was the "hard mass like a sausage" found in the peritoneum. On the left a gap where piece was afterwards cut out, dark from congestion.

Vertical portion shows unaltered soft omentum, here fixed by another glass rod sewn obliquely to it. Upper end where cut from colon.

Piece cut out from lower portion laid across upper portion for exhibition; also dark from congestion. (Photograph by Fred. Halliday, Museum Attendant, University of Liverpool. Nearly half natural size.)

case is a curious and interesting example of the many-sided revelations of hernial emergency.

NOTE.—Since this was written Dr. J. Prescott Hedley (BRITISH MEDICAL JOURNAL, November 11th, 1911) has published, with an illustration, a very able report, with comments and statistics, on a case of "torsion of the great omentum, clinically resembling ovarian cyst with twisted pedicle," and which throws light on the possible cause of omental engorgement in Mr. Cressy's case. In both cases there was abdominal distress at first; severe and continuing in Dr. Hedley's. In both the desirability of operation was evident, and in both its performance was attended with permanent relief and complete justification.

THE Royal Dental Hospital, Leicester Square, has received a donation of twenty-five guineas from the Mercers' Company and one of ten guineas from the Skinners' Company.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

A PRELIMINARY NOTE ON THE USE OF TARAXACUM IN "CANCER."

FOR the last six months I have been systematically giving taraxacum in three cases of cancer, apparently with remarkably beneficial results; and though it is yet too early to decide whether or not the treatment will be a curative one I feel justified in recording the fact, so that others may try the remedy in this disease.

One—Mrs. A., aged 60—is a case of cancer of the bladder. Mr. J. A. Coupland kindly saw the case in consultation with me last October, and agreed with me as to the diagnosis. At this consultation Mr. Coupland used the cystoscope and demonstrated the disease, which was pronounced incurable. A few days after the consultation the patient had prescribed for her liquid extract of taraxacum (P. D. and Co.) ʒj thrice a day in an ounce of water. The dose has since been increased to ʒij, and latterly the *B. P.* preparation has been administered. The patient has gained weight, is now up and getting about, and has very little vesical irritation.

The other two cases are cases of cancer of the bowel where attacks of severe subacute obstruction had occurred. In one case colotomy was advised and prepared for, but the patient and friends refused to have the operation done at the last moment. Both these patients are now having regular and normal stools; they have no feeling of obstruction—which before was constant—they have gained weight and are free from abdominal pain.

Leeds. HERBERT J. ROBSON, M.R.C.S., L.R.C.P.

WIRING SAME FRACTURED PATELLA TWICE WITHIN EIGHT MONTHS.

A. J. H., aged 45, on October 25th, 1910, slipped and "felt something snap" in his right knee. I saw him almost directly after the accident, and found a transverse fracture of the patella with about three inches separation of the fragments. I cut down on the fracture four hours later, wired bone and sutured ruptured capsule and fibrous tissue over patella after Lister's method. The after-history was uneventful, the stitches being removed on November 2nd, when the wound was healed. The patient was up on the eighteenth day after operation, and at the end of six weeks was able to flex the joint to a right angle, and get about with a stick, which was shortly afterwards discarded.

On June 17th, 1911, when running he slipped and felt the bone again go. I operated again ten hours after the accident, and found a clean bony fracture; the wire was also broken, but the separation was much less than on the first occasion, as the wire, although broken, kept the fragments to some extent in position, the distance between them being only about a ¼ inch. The patella was slightly thickened, and the fibrous tissue over the bone very considerably. The joint otherwise appeared normal. Recovery on this occasion was much slower than on the first; the patient did not get up until a month after the operation, and there was some suppuration under the skin flap, but less reaction in the joint itself than after the first operation. In addition the patient was very nervous, and did not want to run any further risks. As the wire caused some irritation I removed it on January 9th, 1912. At the date of writing (May 5th) the patient walks without a stick and has got as good flexion as before the accidents.

On both occasions the fracture was caused by indirect violence. I have not been able to find a similar case recorded in any of the textbooks, and the Librarian of the Association, who very kindly looked up all the references in journals, etc., for me, was also unable to find one. I have therefore thought the case worthy of publication.

THOS. NORTH, B.Ch.(T.C.D.), F.R.C.S.(Ire.)

London, W.

SCIATICA AND BEE-STINGS.

COMPREHENSIVE as is Dr. B. Watson's article in your issue of April 27th, 1912, on the Diagnosis and Treatment of Sciatica, I should like to add one out-of-the-way item of

knowledge, namely, the successful treatment of a subchronic case of sciatica by bee-stings. The words "successful treatment" are used to shade off a too presumptuous use of the word "cure." Time is the great healer of many complaints.

The patient was a well-built railway fireman aged 31, who two years ago, after a wetting, developed acute lumbago followed by sciatic perineuritis and neuritis, which resisted all the usual treatments continuously applied for six months (including severe blistering). At the end of this time, as the man, though desirous, was almost as unable to resume his work as six months previously, I was allowed by the kindness of Dr. H. M. Henderson to try bee vaccination.

During the ensuing four weeks I submitted the patient to 64 bee-stings along the course of the nerve. The symptoms rapidly improved, and his walk changed from a painful crippled hobble to an ordinary stride. At the end of six weeks he resumed his heavy stooping work of stoking, without pain. Two months later he presented himself to report continued freedom from any trouble, in which state, so far as I know, he has continued. Of course, bee-sting venom is a reputed antidote to rheumatism. An article on this subject appeared in the British Medical Journal about five years ago.

Liverpool. C. Alston Hughes.

Reports

ON

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF THE BRITISH EMPIRE.

ST. MARY'S HOSPITAL.

SUPPURATING HYDATID CYST OF THE LIVER TREATED BY INCISION AND WAX INJECTION.

(Under the care of Mr. J. Ernest Lane, F.R.C.S.)

The patient was a single woman aged 50, and the history she gave was as follows: About six months ago she noticed a small lump in the upper part of the abdomen just to the right of the middle line, covering an area as large as a florin. It caused her no trouble and did not increase in size. Six weeks before admission a second small swelling appeared, above and slightly to the left of the first, which grew rapidly, and became blended with the first. On admission, the patient presented a swelling in the middle line of the epigastrium, about 2½ in. in diameter. It was soft and fluctuant, the skin covering it was thin and bore a slight dusky red colour It was partially reducible, and on coughing there was a small but distinct expansile impulse. No signs of a diseased rib were noted, except a little tenderness on pressing the eighth left costal cartilage. The liver was palpable just below the costal margin, otherwise nothing abnormal could be felt in the abdomen. The temperature was 98°, the pulse 96, and the urine normal. Scarlet fever had been the only previous illness, and the patient had never been out of England. When questioned after the operation she admitted having kept a dog for a number of years, and of growing lettuce, cabbage, etc.

On December 4th the patient was operated upon, and it was discovered that the epigastric swelling contained yellowish-brown pus. The extent of the abscess cavity was determined by a probe in order to find the source of the pus, but instead of a carious rib, as had been suspected, the origin of the pus was seen to be a minute hole in the linea alba, from which pus was continually exuding. When this small channel had been enlarged, it was found to communicate with a very large cavity in the right lobe of the liver, full of the same kind of pus, together with some gelatinous membranous material resembling the collapsed walls of hydatid daughter cysts, and one or two unbroken cysts. The walls of the cavity were rigid, and imparted a sensation of grittiness due to partial calcification. The extent of the cavity upwards was to the level of the lower border of the fourth rib and downwards to the costal margin on the right side. The cavity having been evacuated it was irrigated freely and then packed with iodoform gauze. Almost immediately on returning to the ward from the theatre, an urticarial rash appeared over the greater part of the body. It completely disappeared in a few hours. On the next day the serum test for hydatid infection (analogous to the Wassermann test for syphilis) was performed by Dr. Alexander Fleming, yielding a positive result; characteristic hooklets were found in the pus.

During the following five weeks the cavity was dressed daily by gauze packings, but there was a free discharge of pus and the extent of the cavity diminished only very slowly, in fact the patient, though quite well as regards her general health, was in a stationary condition as far as her liver was concerned.

On January 8th an attempt was made to close the cavity by filling it with a mixture of bismuth and wax, first sterilized by standing the jar containing it in boiling water for an hour; it was then allowed to cool to about 45° C., and quickly injected into the cavity through a fine glass nozzle passed to the bottom of the cavity. Enough wax was injected to allow a considerable overflow so as to ensure that the wax penetrated every recess of the cavity.

During the first two days there was a slight discharge of the excess of wax, but on the third day the dressing was clean and the wound completely healed.

On the evening of the fourth day the temperature suddenly rose to 104° F., but the patient complained of nothing except a slight headache, while the local condition was entirely satisfactory, and by six the following morning it had sunk to 98° F., after which it remained at the normal level throughout.

After injection, the region of the liver was submitted to *x*-ray examination, when the shadow of the cyst full of bismuth was clearly seen as a pyriform area extending to the right.

The patient was discharged from the hospital as cured at the end of January, but presented herself on February 20th with a sinus at the seat of the operation, from which the bismuth and wax were escaping; the cavity was irrigated and a drainage tube inserted.

The chief interest in the case lies in the diagnosis and the treatment. A soft fluctuant swelling in the epigastrium without any symptoms would commonly be diagnosed as a lipoma or a cold abscess, but the symptoms of an enlarged liver and partial reducibility of the tumour into the abdomen, together with the expansile impulse on coughing, should have suggested the origin of the disease in the liver. The case also illustrates the value of the serum complement-fixation test for hydatid infection. Had it been performed before the operation the diagnosis would have been established, whereas if a hydatid cyst had been considered before operation it would probably have been rejected as a diagnosis when the patient stated that at no time had she been out of England. The treatment of the case resolved itself into the treatment of a cavity with rigid walls in a state of chronic suppuration and showing no inclination to obliterate itself.

For the notes of this case I am indebted to my late house-surgeon, Mr. A. W. Bourne, F.R.C.S.

The *Bulletin administratif du ministère de l'instruction publique* states that on January 15th, 1912, the number of medical students in the medical faculties of France was 8,265. Of that number 7,400 were men, including 742 foreigners; and 865 women, of whom 508 were foreign. The students were distributed among the several universities as follows: Paris, 4,170; Lyons, 1,601; Bordeaux, 791; Montpellier, 681; the rest being scattered about Toulouse, Nancy, Lille, and Algiers. In addition to these, there were 1,522 male students in the medical schools, of whom 1,481 were French; and 134 women, of whom 116 were French. Marseilles headed the list of schools with 240; next came Rennes with 147, and Nantes with 116; the other schools had each from 30 to 50. The largest element among the foreign students was formed by the Russians, of whom there were 602 in Paris and 128 at Montpellier. Next came the Turks, of whom there were 71 in Paris; then Bulgarians, of whom there were 63; then Roumanians, of whom there were 57. All nationalities are represented except the Japanese.

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, May 13th, 1912.

Dr. J. MITCHELL BRUCE, President, in the Chair.

The Sphygmomanometer in General Practice.

DR. F. DE HAVILLAND HALL, in opening a discussion on the subject, said that it was his object to consider whether the sphygmomanometer, with all its fallacies and limitations, was likely to be of sufficient service to the general practitioner to justify the small outlay involved in buying the instrument and the amount of time required to make the examinations. His own experience, though limited, led him to give an affirmative answer. He had nearly always employed the Riva-Rocci instrument as modified by Martin. The sphygmomanometer was of great use not only in enabling definite records of the blood pressure to be kept, but also in revealing instances of increased blood pressure, which might otherwise have been overlooked. He remarked on the great advantage it was to be able to keep a record of the blood pressure while the patients were undergoing treatment with the hope of reducing tension and then checking the action of the remedial measures employed. He had contented himself with recording the height of the column of mercury when the pressure in the band around the arm was sufficient to obliterate the pulse at the wrist. Sir Lauder Brunton's figures as to the normal standard of pressure were quoted, namely, in young men the tension would be from 100 to 120 mm., in middle life 125 to 135 mm., and above 60 145 to 150 mm. The speaker, in order to illustrate the value of the sphygmomanometer, had taken a series of consecutive cases in his case-book, and divided them into six groups:

	No. of Cases.	No. of Deaths.
Arterial pressure of 120 mm. or below ...	35	2
Arterial pressure of 121 to 140 mm. ...	56	2
Arterial pressure of 141 to 160 mm. ...	34	1
Arterial pressure of 161 to 180 mm. ...	19	5
Arterial pressure of 181 to 200 mm. ...	12	5
Arterial pressure above 200 mm.	17	9

From an examination of these cases he was of opinion that the sphygmomanometer was capable of affording valuable information as to the condition of the patient. It was not only useful from the point of view of prognosis but also in treatment, by indicating the measures to be taken to lower the patient's tension and at the same time enabling the effect of such on the pressure to be noted. Still, he could not omit a warning against the incautious use of the vaso-dilator group of drugs.

Sir LAUDER BRUNTON said that he now used a manometer of the aneroid type, but found it necessary to compare it occasionally with a mercurial manometer. He considered the systolic pressure usually the most reliable. If the blood pressure was below 100 mm. in an otherwise healthy man it was almost certainly due to excessive smoking. If there was no evidence of this, careful examination should be made for phthisis. In angina, if the tension was high, the prognosis was better than if low, for death often occurred unexpectedly in the latter case. In the treatment of high blood pressure he emphasized the importance of absence of worry.

Dr. LEONARD HILL thought that the sphymomanometer was an accurate means of estimating the blood pressure. It had led to many important physiological observations. In compensated cases of aortic regurgitation the blood pressure was greater in the legs than in the arms by as much as 100 to 150 mm.

Dr. GEORGE OLIVER had lately come to the conclusion that the reading obtained of the diastolic pressure was as precise as that of the systolic, and was even more valuable. It was a point worthy of more study by the auscultatory method.

Dr. A. M. GOSSAGE thought that for purely clinical purposes Dr. Leonard Hill's small instrument was more suitable, but for research work a larger instrument was necessary. To-day the systolic pressure was the more generally recorded and the more useful, but to-morrow they might find that the diastolic pressure was really more valuable. He thought that no instrument could compare with Dr. Oliver's for recording the diastolic pressure.

Dr. BEZLY THORNE favoured the aneroid, 4½ in. in diameter, introduced by Hill and Barnard, which he at times connected by a two-way tube with a mercurial barometer for control purposes. He noted four special data: the systolic pressure, the point of radial obliteration, the area of maximum migration which he denominated balance pressure, and the migration of the needle or mercury at the balance point.

Dr. F. W. PRICE was very sceptical of the value of the readings of the diastolic pressure (because during diastole the pressure was continually falling), and also of the records obtained in cases of heart disease with a completely irregular rhythm. It was important also to know the patient's usual blood pressure previously. In some it fluctuated greatly from day to day. Some results of investigations on the action of drugs on blood pressure in the human subject tended to shake his faith in their value.

Dr. O. K. WILLIAMSON, Dr. JOHNSTON-LAVIS (Vittel), and Dr. HAROLD DES VOEUX also spoke, and Dr. DE HAVILLAND HALL briefly replied.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Saturday, May 11th, 1912.

Mr. J. B. LAWFORD, President, in the Chair.

Sarcoma of the Choroid.

DR. LEDIARD (Carlisle) recorded a case in which metastatic sarcoma of melanoid type was found in the liver and intestine of a woman aged 55, during an operation for gall stone. It was learnt that three years previously the patient had had the left eye removed in the Manchester Royal Eye Infirmary on account of an intraocular growth, which was diagnosed as melanotic sarcoma, and proved to be such.

Strabismus Operations.

Mr. BISHOP HARMAN (London) described a new operation for squint, which he entitled "subconjunctival reefing and advancement." He had devised it in order to avoid necessity for tenotomy and for keeping the patient in bed with both eyes bandaged. It was comparatively easy to perform, and expeditious. In the 34 cases in which he had employed the operation only one patient had been kept to bed; all the others had been outdoor patients with only the one eye bandaged. The results up to date were distinctly gratifying both to patient and surgeon. Briefly, the operation consisted in exposing the edges of the tendon to be shortened, then with special forceps folding or reefing the tendon, very much in the same fashion that the laundry-maid treats linen frills in the process of goffering. The operation could be varied according to the degree of squint: (1) The extent of the reefing or shortening of the tendon could be varied by the adjustment of the reefing forceps; (2) in high degrees of squint the sutures used to secure the reef were carried forward so as to advance the reef. The steps of the operation (say for convergent squint) were: (1) Securing the eye by the insertion of an anchor stitch at the limbus; this avoided fixation forceps, and the stitch was used to fix the eye in abduction at the end of the operation. (2) Locating the tendon. It was pointed out that there were distinct colour differences in the conjunctiva according as tendon or Tenon's capsule was beneath it. These differences were marked in the young. (3) Two button-holes were cut through conjunctiva right to the sclera above and below and parallel to the edges of the tendon, between the insertion and the canthus. (4) The surfaces of the tendon were rasped with a squint hook the edges of which had teeth. This stimulated the production of adhesions when this part of the tendon was folded. (5) The reefing forceps were applied to the tendon. The forceps were like squint hooks whose short flat handles fitted together and were adjustable so that the hooks coincided or separated by varying widths. Working from the outer canthus one blade was slipped beneath the tendon and the other blade above the tendon and under the conjunctiva. When the forceps were turned from the outer canthus to lie across the nose the tendon was folded over or reefed. (6) The base of the reef was then fixed by appropriate sutures. If the squint was of low degree the operation was then finished. If

it were of high degree, the sutures were carried forward and fixed into the sclera at the limbus, so that tying the sutures advanced the reef and further abducted the eye. (7) Finally, the eye was completely abducted by means of the anchor stitch; this was fixed to the skin of the canthus with strapping. By this means relaxation of the antagonist of the operated muscle was produced, and it protected the reef from too early strain. The eye was bandaged, the spectacles worn with a blinker beside and half covering the open eye, so as to cause the patient to look towards the operated muscle. The anchor stitch was removed on the third day, and the reefing stitches on the tenth day. Mr. Bishop Harman also gave an account of some experiments to ascertain the security of sutures for squint operations. He concluded that a double silk thread placed in the sclera across the axis of the tendon, and therefore transversely to the strain of the suture, had a carrying power from 12 to 18 per cent. greater than the other three possible modes.

Fusion Pictures.

Mr. H. H. B. CUNNINGHAM (Belfast), in a paper on fusion pictures, emphasized the importance of training the fusion sense in young children, but thought that stereoscopes and the like were too complicated and too expensive for general use. He had had devised a series of pictures drawn in two colours which could be seen through a coloured screen. One part of the picture could be seen with one eye and one part with the other. Those for very young children were of a very elementary character, but for older children they were rather more elaborate. In this manner, as in the case of an ordinary stereoscope, binocular vision could be developed and educated.

Cataract Extraction.

Mr. J. STROUD HOSFORD (London), in describing a new method of extraction of cataract in the capsule, said that the operation was justly looked upon as a major operation, and the premier operation in ophthalmic surgery. Very serious dangers could be avoided if removal of the lens in its capsule could be done with safety. During the present year he had performed nine cataract extractions by a new method, which consisted of entering a discission needle into the lens and then rotating the lens on an antero-posterior axis. This caused the zonule of Zinn to be torn, after which the lens in its capsule could be removed without the loss of vitreous. The lens could be thus rotated either before or after the making of the section. If this method were adopted incomplete lenses could be removed, and it had all the advantages of Smith's operation, besides being safer and not so complicated.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF MEDICINE.

Friday, April 26th, 1912.

Sir JOHN MOORE, President, in the Chair.

Myelogenous Leukaemia.

DR. PARSONS, after referring to 4 cases of myelogenous leukaemia which had been under his care, suggested that they supported the following propositions: (1) That a considerable reduction in the size of the spleen in myelogenous leukaemia can be induced by the use of x rays, either with or without arsenic. (2) That a marked reduction in the number of the leucocytes follows on the same line of treatment. (3) That there is no material increase in the output of uric acid, phosphates, and sulphates while this material reduction in the leucocytes is taking place. (4) That the improvement under treatment is very striking, but is not permanent. Dr. O'SULLIVAN demonstrated the pathology of these cases by means of lantern slides. He said that in leukaemia myelocytes tended to collect in greatest number in the splenic blood spaces, hence the enlargement of the spleen. The x rays destroyed the myelocytes in the splenic blood spaces, and those that were circulating through the spleen. Thus a diminution in myelocytes in the circulating blood and a diminution in the size of the spleen were found after x-ray treatment. The fact that x-ray treatment was not of permanent use he attributed to an increase in the spleen of connective tissue, which interfered with the penetration of the rays. Dr. BENSON said there was a certain amount of difficulty to be overcome in treating patients with the x rays in such cases, namely, to give the patient sufficient dosage of the rays without causing dermatitis. The first two patients showed fairly extensive dermatitis, whereas in the case of the boy treated later there was none, although he had had 175 exposures; this was attributed to improved technique. In cases of relapse, the spleen did not retract at the same rate, and never to the same extent, nor did the blood count go back at the same rate as during the initial treatment.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

AT a meeting on May 8th, Mr. T. H. IONIDES, the President, in the chair, the following were among the exhibits:—Dr. L. A. PARRY: A case of *Wiring of the humerus* in a boy. The lower end was fractured, and there was difficulty of getting the broken ends in accurate apposition by the usual method of treatment—that is, fixation in the fully flexed position. There had been some musculo-spiral paralysis after the operation, but this had now cleared up, and the result was quite good, there being almost perfect movement in all directions. Dr. BAILEY: A woman of 30, who was probably an early case of *Disseminated sclerosis*. She had nystagmus, tremors, and left lingual paralysis. Dr. WALTER BROADBENT: (1) A case of *Morbus coeruleus* in an undersized boy of 12. He had a blue appearance, very marked on exertion, and his finger ends were much clubbed. There was hypertrophy of the heart, mainly of the right ventricle. On auscultation there was a loud, rough systolic murmur in the third left space. The condition was probably pulmonary stenosis with patent foramen ovale. (2) The heart and brain of a girl of 12, who, during an attack of *Acute endocarditis*, developed a right hemiplegia from embolism, and some weeks later suddenly became comatose. There was retraction of the head, conjugate deviation of the head and eyes to the right, and loss of knee-jerks. *Post mortem* was found a large subarachnoid haemorrhage on the under surface of the medulla, pons and crura. The lateral ventricles also contained blood, the left more than the right. In the heart only the mitral valve was affected and about a square inch of the auricular wall above the valves.

UNITED SERVICES MEDICAL SOCIETY.

AT a meeting on May 8th, Major E. B. WAGGETT, R.A.M.C.(T.), President, in the chair, Lieutenant-Colonel J. F. DONEGAN, R.A.M.C., gave a demonstration of an operating table designed by him for use in the field. It was of aluminium tubing, was 4 lb. lighter than the present pattern, and presented various other advantages. Major F. E. FREMANTLE, R.A.M.C.(T.), in a paper on the *Sanitary service of the Territorial Force*, pointed out that since regimental medical officers of the Territorial Force were not trained sanitary officers, as in the line, there was much greater need for the activities of divisional sanitary officers and of sanitary companies. The duties of regimental sanitary squads were so unattractive that the men should be offered special inducements in the way of extra pay and quicker promotion. The water duty men had no function in camp in peace time, and were not likely to be needed in war time in this country, where water supplies were usually good, and only needed proper protection from pollution by ordinary military measures. Each division should have a sanitary company under the divisional sanitary officer, who should preferably be a county medical officer of health in the area from which the division was drawn. Every effort should be made to keep in close touch with the civil sanitary authorities, so as to get the advantage of their local knowledge. Major CALDWELL SMITH, R.A.M.C.(T.), in a paper on the *Duties of sanitary companies of the Territorial Force*, urged that the number of non-commissioned officers should be increased so as to allow of the company being split up into eight sections for the purposes of their duties in the various parts of the area under their charge. The non-commissioned officers should be recruited from among civilian sanitary inspectors. It was probable that on mobilization the Territorial Force would establish large concentration camps, and that the sanitary companies would find their chief functions in the

sanitary care of such camps. A distinction should be made in the uniform of the men of the sanitary companies, so as to prevent their being taken away from their proper duties.

CORRECTION.—The name of Dr. Walter Swayne, who read a paper on the *Clinical significance of acidosis in pregnancy* before the meeting of the Obstetrical and Gynaecological Section of the Royal Society of Medicine, was incorrectly printed "Sawyer" in the report of the meeting published in our issue of May 18th, page 1130.

Reviews.

HUMAN INITIATIVE.

DR. C. J. WHITBY has written a very interesting book, to which he has given the title *Makers of Man*. Its scope is perhaps better indicated by its subtitle, "A Study of Human Initiative." The author's general plan has been to examine the available facts as to the heredity and environment of forty famous men for indications of any circumstances which may be assumed to have combined to cause them to be initiators or innovators, and their careers to mark epochs in the affairs and the thoughts of mankind; incidentally, the comparison of the antecedent and attendant conditions of their lives raises the question whether any common factors can be discovered in heredity to account for their genius and influence, or, if not, whether some other hypothesis may not be justified.

When all allowance has been made for the *Zeitgeist*, which has been defined as "the drift of thought and feeling in a period," the impartial student of history must admit that men have lived whose deeds or teachings have changed the course of things and thoughts. It may be that they did no more than open the sluices and let out, to do the work it was destined to do, the head of pressure that had been slowly accumulating; it may be, however, that they also directed the course of the flood, and themselves provided at least part of the force. The simile of a flood is not inappropriate, for the really epoch-making men have been, as Dr. Whitby points out, in essence constructive and only incidentally destructive—as the Nile flood is controlled to fertilize the parched lands, and only incidentally to sweep away rubbish.

The bulk of the book is given to a biographical study of the ancestry and lives of the forty great men selected. The field of selection was limited by two considerations. In the first place it was necessary to choose men about whose ancestry and physical characters a good deal was known with reasonable certainty. On this point the author in his preface declares that "it is time that biography were taken seriously as a department of science, that biographers began to realize their responsibilities as purveyors of the raw material of inductive psychology." In the second place, it was desirable to choose persons who lived long enough ago for their achievements to have fallen into proper historical perspective. The forty immortals selected are divided into four chief classes—the man of action, the artist, the philosopher and scientific discoverer, and the ethico-religious pioneer. In succeeding chapters the facts which Dr. Whitby has collected are considered under the several heads of family history, parentage and constitution, physical characteristics, and natural vocation. This section of the book is followed by a chapter on the natural history of purpose, and that by another on "power in the crucible," in which certain characteristics of what may be called the preparatory period of genius are compared or contrasted. Here and there, by the way, the author finds occasion to give expression to conclusions which, as we apprehend, he intends to be taken as provisional. For example, in considering the family history of his subjects, he says: "It is talent rather than genius, character rather than temperament, that repeats itself in father and son. The transforming increment of power and insight, whatever its ultimate, possibly transcendent, origin, has, genetically speaking, commonly a maternal, or at least a feminine, source"; but he adds further on, "it seems to me to be credible that intellectual, as distinguished from aesthetic, genius may be in some cases traceable mainly to a masculine source." There are many other such incidental tentative generalizations which the reader will find give him much food for thought, and help to rivet his attention on the details the author has so carefully elaborated on every aspect of his subject. But so far Dr. Whitby has stuck pretty closely to his facts, leaving them for the most part to produce their own impression on the reader's mind. In his last chapter, on "individuality, its nature and power," he lets himself go, and, to quote his preface, has given "speculative imagination the licence it may on occasion justly demand." He declares that "Back to Leibnitz" must be the cry of all who grasp "the futility of nineteenth century attempts at cosmology," and laments that the result of the disregard of the warning given by the great German teacher should have led to the acceptance of a crudely mechanical empiricism. For Dr. Whitby there is "in individuality a something over and above the multiplicity of psychic potentialities traceable to this, that, or the other ancestor." Further on, he says:

> What, for the sake of convenience, we call individuals are, strictly, mere personalities, more or less limited, more or less flawed and self-contradictory, consequently, more or less transient and unreal. I am not contending for the personal immortality of every Dick, Tom, and Harry; nor, indeed, of even the most exalted souls. I suggest merely that, underlying every subjectivity, there is an unknown factor of whose nature that subjectivity is a genuine, however incomplete, manifestation; and that this unknown factor, whether we call it immortal or decline to commit ourselves to that large word, should be conceived as exempt from the ordinary limitations of time and of space. Further, that this unknown factor be regarded as a source of creative spontaneity, a causal determinant of all phenomena in any way contributory to the development of that personality which constitutes the provisional manifestation of its own essence.

We cannot follow Dr. Whitby further in this concluding chapter, which is a complete essay in itself; but we have said enough to indicate the direction in which he is trending, and have said enough also to show the erudition, industry, and courage which have gone to the writing of a very stimulating book.

[1] *Makers of Man: A Study of Human Initiative.* By Charles J. Whitby, M.D.Cantab. London: Rebman, Limited. 1912. (Med. 8vo, pp. 438; 47 plates. 10s. 6d. net.)

THE GRAMMAR OF SCIENCE.

WE are all familiar with the statement that criticism is the refuge of literary failures, and the dictum is no longer thought to deserve a refutation. It is, however, true that a considerable proportion of those who have essayed a critical examination of the foundations and logic of scientific method have not themselves been conspicuously successful exponents of the methods in question. In consequence of this fact the methodological writings of experienced investigators command a large amount of attention. Professor KARL PEARSON has been the hero, or—depending on the point of view—the victim, of many a stricken field of scientific controversy; but few even of his opponents have denied that Professor Pearson is one of the most brilliant and original investigators of the present generation, and his profession of the scientific faith which is in him merits the most careful study. The book under notice[2] is the first volume of the third edition of a work which has been before the public for some twenty years.

It will be remembered that Professor Pearson's main object was to demonstrate that the function of science is essentially descriptive, that a scientific law is a formula briefly resuming the results of perceptual experience. In other words, science is concerned with the demands of "Madame How," not with those of "Lady Why." The notions of "force" and "matter" current in educated circles were examined from this point of view. The difficulties which arise when, for instance, "force," instead of being regarded as a certain convenient measure of motion, is regarded as the latter's cause, were placed in the clearest light. In the latter portions of the book which dealt with certain aspects of biological science, the method was not so directly epistemological, and these sections have been reserved for a second volume in the present edition. The first part of the book may be instructively compared with the grammar of another distinguished mathematician, *La science et l'hypothèse* of M. H. Poincaré.

The new third edition is an enlargement of the second; a good deal of new matter has been added, in particular an account of the principles of the calculus of correlations

[2] *The Grammar of Science.* By Karl Pearson, M.A., F.R.S. Part I, Physical. Third edition, revised and enlarged. London: Adam and Charles Black. 1911. (Medium 8vo, pp. 414; figs. 25. 6s. net.)

and a chapter (by Professor E. Cunningham) treating of modern physical ideas. In a new preface Professor Pearson, after stating that his views respecting "force" and "matter" have become to a large extent incorporated in the general system of modern thought, makes the following remarks:

> Beyond such discarded fundamentals as "matter" and "force" lies still another fetish amidst the inscrutable arcana of even modern science—namely, the category of cause and effect. Is this category anything but a conceptual limit to experience, and without any basis in perception beyond a statistical approximation? The very idea will be scouted now, as Professor Tait scouted in 1885 the non-reality of force, or Lord Kelvin later the non-reality of the ether. But the real question is, What will men of science be saying twenty years hence?

We cannot presume to guess what men of science will be saying twenty years hence, but we are fairly confident that some at least of them will have been interested and stimulated by Professor Pearson's *Grammar*, and we are sure that its perusal will be of great service to students of any branch of knowledge.

HANDBOOKS OF MEDICINE.

THE modern student of medicine has no reason to complain of the want of good textbooks; his difficulty is rather to make a choice among so many that are excellent. English students will naturally prefer books written by their own teachers, but there is no better American work than Dr. ANDERS's *Textbook of the Practice of Medicine*,[3] which has now reached its ninth edition. We have read a good deal of it, and tested it in many places, and find its teaching adequate and accurate. It is strongly bound, well printed, and contains numerous good illustrations. The spelling is, of course, transatlantic, all diphthongs being omitted; but an American should not spell the name of Huntington with a "d," and on page 1128 "Gower" should be Gowers. The description of the sequelae of influenza might certainly be more fully discussed, as the heart complications are important and deserve mention; nor is the description of the bacteriology quite up to date. In the paragraph on the prognosis of diabetes it is not very satisfactory to the student or the practitioner to be told that "pancreatic" cases are unfavourable, as the description of pancreatic diabetes (p. 419) gives no clear indication for its diagnosis, and we do not know that any exists. It is a mistake to say that Bass's ale is suitable for diabetics because "all the sugar is converted into carbonic acid and alcohol," for, at least in England, Bass's ale contains about 400 grains of sugar to the pint. The somewhat complicated diagram on p. 1128 is not made clearer by the description, as the letterings do not correspond in the figure and the description. The statement that jaundice and ascites are rare in cancer of the liver strikes us as strange, and it may be doubted whether the condition that Murchison described as "lithaemia" actually exists. While no one in the present day can be at the same level in all branches of such a vast subject as medicine, even after it is divested of the various specialities, Professor Anders has unquestionably succeeded in writing one of the best of modern textbooks on the subject.

In the second edition of the treatise on special pathology and therapy, edited by NOTHNAGEL,[4] we have an old and valued friend, improved, enlarged, and brought up to date. The work does not require commendation, since the first edition has paved the way for the second and has established a thoroughly sound record. We have a few parts before us, of which a short account may be given. Professor STICKER has contributed a very good account of whooping-cough,[5] covering some 231 pages. It is divided into an epidemiological and a clinical part. It is of interest to note how he deals with the treatment of the disease. He, like other clinicians, has experimented with homoeopathic remedies and has attempted to determine what the drug contained in one remedy was. While he was unable to determine this with certainty, he has reason to believe that it was *drosera*. He states that care must be exercised with this drug, since, when the dose is too large, the symptoms are intensified instead of being relieved. He indulges in brief discussions of some little-known views. The article closes with a good bibliography. The article on measles was begun by the late VON JÜRGENSEN and rewritten by VON PIRQUET.[6] The author is a man of strong convictions, and his views are not universally accepted. The account contains little of von Jürgensen's teaching, but is full of "anergie" and doctrines associated with the name of von Pirquet. He defines the anergetic period as one in which the power of the organism to react is defective. This period is said to last one week in measles. The author devotes seventeen pages to an attempt to demonstrate the reduced power of reacting to tuberculin in cases of measles. On the whole, the account is full and good, and a fairly satisfactory bibliography is appended.

[3] *A Textbook of the Practice of Medicine.* By James M. Anders, M.D., Ph.D., LL.D. Ninth edition. Thoroughly revised. Philadelphia and London: W. B. Saunders Co. 1910. (Roy. 8vo, pp. 1326; 81 illustrations. 24s.)

[4] *Spezielle Pathologie und Therapie* (Nothnagel). Second edition.

[5] *Die Keuchhusten.* By Professor Georg Sticker of Bonn. Vienna and Leipzig: Alfred Hölder. 1911. (Sup. roy. 8vo, pp. 231; 1 plate. 6s.)

[6] *Masern.* By the late Professor Theodore von Jürgensen. Second edition, rewritten by Professor C. Freiherr von Pirquet of Vienna. Vienna and Leipzig: A. Hölder. 1911. (Sup. roy. 8vo, pp. 196; 32 illustrations. 5s. 6d.)

CLINICAL SYMPTOMATOLOGY.

THE book by ALOIS PICK and ADOLPH HECHT, translated from the German under the editorial supervision of Dr. KARL KONRAD KOESSLER, of Rush Medical College, University of Chicago, under the title, *Clinical Symptomatology*,[7] is a very valuable work, and the editor has rendered a service to the medical profession by making it available to English readers. It is presented in a volume of 835 pages, just a little heavy for comfortable handling, but well printed in clear type. The following extract from the preface sets forth the aim and underlying principle of the work:

> Clinical instruction aims to banish a set symptomatic therapy from the mind of the student of medicine. It is emphasized again and again that therapeutic measures should not be directed against single symptoms, but whenever possible, against the primary disease. Unfortunately the number of morbid processes in which there exists an effective specific therapy is very small. The physician is obliged to select those symptoms from the total picture which, if successfully combated, will render the greatest benefit to the patient. When it is beyond our power to influence the etiologic factors, the recognition and treatment of the life-threatening symptoms becomes the most important task. . . . In the succeeding pages we have expanded somewhat the meaning of danger. To us danger is not only everything that threatens life immediately, but every symptom which indicates persistent damage, and a difficultly reparable condition.

The authors have succeeded fairly well in keeping these important principles in view throughout the work. In the first chapter, after a brief account of anomalies of the skin, general symptoms, including under that head anomalies of nutrition and development, and anomalies of temperature are considered. The discussion of disturbances of metabolism in children is particularly valuable and interesting. In dealing with temperature there is abundant opportunity of enforcing the therapeutic ideal in treating causes rather than symptoms. The frequent illusiveness of the ultimate cause of an abnormal temperature is also amply illustrated. In succeeding chapters, disturbances of the heart's action, of the respiratory, digestive, and other functions, are treated in the same broad general way. The application of the principles to practical treatment is never lost sight of, and the directions for treatment are generally detailed and precise. The book is not easy to read. In the style there are evidences of its Gothic, and in the spelling of its transatlantic, origin. "Severe" is constantly used as a synonym for great or considerable, with a curious effect in some cases. Words of classical derivation—for example, "amaras," for bitters—are frequently used when the use of ordinary English terms would to most readers seem better. These, however, are slight blemishes, and detract very little from the value of the book as a whole.

[7] *Clinical Symptomatology.* With Special Reference to Life-Threatening Symptoms and their Treatment. By Alois Pick, Professor of Medicine, University of Vienna, and Adolph Hecht. An authorized translation under the editorial supervision of Karl K. Koessler, M.D. London: D. Appleton and Co. 1910. (Royal 8vo pp. 833. 25s. net.)

OPOTHERAPY.

OPOTHERAPY, or the treatment of disease by extracts of various tissues or organs, is a method that has scored brilliant successes. It is necessary only to quote adrenalin and thyroid extract to show its value. A little volume by Dr. HALLION[8] gives a very useful and practical account of the various tissue extracts; he mentions no less than twenty-seven that have met with opotherapeutical employment. The first chapter deals briefly with the general principles of the method, the second explains the properties of the different organs and tissues and of their extracts. The bulk of the book gives in eighty pages an alphabetical list of the diseases in which opotherapy has proved serviceable and an account of the indications for its employment. Finally, the author gives notes on the details and posology of the various treatments. The book is well arranged and clearly written, and it breathes the spirit of optimism that should form part of the opotherapist's outfit; it may be recommended to the attention of the up-to-date practitioner.

Drs. LÉOPOLD-LEVI and HENRI DE ROTHSCHILD have published a second series of studies in the physiology and pathology of the thyroid body and other glands yielding internal secretions.[9] As we remarked about their previous work (BRITISH MEDICAL JOURNAL, June 27th, 1908, p. 1511), the authors believe that doses of thyroid gland are therapeutically efficacious for an extraordinarily wide range of diseases; we think their claims for the success of this method of treatment need, in many instances, independent confirmation at the hands of others before their recommendations can be accepted as proved. They write with enthusiasm, at great length, and in an effusive style; but it is difficult to say how far the new ideas which they deduce from their researches will survive the test of time. In the present volume they discuss the relationship of thyroid deficiency to chronic rheumatism, and argue that treatment with thyroid may be used with success in cases of this affection. They also write profusely upon the physiological and pathological relations of the glands possessing internal secretions to the hair, the teeth, and the nails. Other chapters are devoted to the derangements of the nervous system and of nutrition which may be attributable to thyroid disorder. Much of what the authors say is simply an amplification of well-known facts concerning the disorders attributable to thyroid impairment, and as such calls for no criticism; but an attitude of cautious reserve is desirable when they seek to carry us beyond this well-established ground. Similar effects may be due to a variety of causes, of which thyroid deficiency is only one. The authors view their subject through coloured spectacles, which blur their vision of other possible causes requiring consideration.

NOTES ON BOOKS.

THE volume recording the *Transactions of the American Hospitals Association*[10] at its thirteenth annual conference contains some fifteen papers, among them being a well illustrated report on the best ways of finishing off the interior of hospital buildings and subsequently equipping the wards and their annexes, as gauged by an examination of the most recently constructed hospitals in America and on the European continent. Two other papers of general interest to those engaged in hospital administration in this country deal with the drawbacks and advantages of all hospitals in any given locality purchasing their supplies through a central bureau, such as that which has existed in New York for the past two or three years. They were followed by a prolonged discussion in which the experience in this connexion of a considerable number of institutions was recorded. Upon the whole the verdict was favourable to the system.

Some small volumes which have reached us belong to a series now in course of publication under the title of *The People's Books*.[11] One of them deals with the principles of electricity, a second with botany, a third with heredity, and a fourth with organic chemistry; and in each case the author is a person with an established position in the science with which he deals. In each case, too, the subject is completed in a space equal to about twenty-four pages of this JOURNAL, the ostensible aim being to supply an account comprehensible by a person of average intelligence who is prepared to read what is set before him with some care. There appears to be a demand for publications which attempt to supply a royal road to scientific knowledge by giving an account of the details of sciences as well as an exposition of their general principles, but their real utility is open to doubt. The capacity of the reader of "average" intelligence for totally misunderstanding statements which the writer regards as of lambent simplicity is not easily gauged by an expert in any given subject. Still these particular works are favourable specimens of their kind, and their preparation must have entailed a serious amount of thought and labour on the part of their authors.

Both the main parts of *The Public Schools Year Book*[12] are of distinct utility to parents. In the first, the authors, Messrs. H. F. W. DEANE and W. A. EVANS, supply an account of practically all schools which can claim a right to representation at the Head Masters' Conference; this part would be still more informing if the details supplied covered the same items in all cases. In the second, the authors perform a like task with reference to public school and university entrance examinations and about a dozen of the professions and occupations likely to suggest themselves to the average parent of a public schoolboy. A condensed account is also given of the proceedings at the annual conference, this publication being the official book of reference thereto. The conference held its first meeting in 1869, at which date the number of institutions ranking as public schools appears to have been 37; it is now 114.

Mr. MIDDLEWEEK'S[13] little book contains in some thirty-three pages concise directions for the performance of Swedish remedial gymnastics and massage. The directions are clear, but it would have been better if a few diagrams had been added. We note that the writer recommends gentle massage in acute joint conditions, that he believes that massage of the bladder is useful in various conditions, and that he speaks with approval of its use in the treatment of various uterine diseases and displacements.

[8] *La pratique de l'opothérapie.* By M. L. Hallion. Paris: Masson et Cie. 1911. (Cr. 8vo, pp. 148. Fr. 2.)

[9] *Nouvelles études sur la physio-pathologie du corps thyroïde et des autres glandes endocrines.* (Deuxième Série.) Par les Drs. Léopold-Levi et Henri de Rothschild. Paris: O. Doin et Fils. 1911. (Roy. 8vo, pp. 558, with 26 figures and 18 plates. Fr. 12.)

[10] *Transactions of the American Hospitals Association.* Thirteenth Annual Conference. Volume xiii. Toronto, Canada: The Association, Office of the Secretary. 1911. (Roy. 8vo, pp. 512, 48 illustrations.)

[11] *The People's Books: The Principles of Electricity*, by Norman R. Campbell, M.A.; *Botany of the Modern Study of Plants*, by Marie Stopes, D.Sc.Lond.; *Heredity*, by J. A. S. Watson, B.Sc., F.R.S.E.; *Organic Chemistry*, by Julius B. Cohen, F.R.S. London and Edinburgh: T. C. and E. C. Jack. (All fcap. 8vo, averaging pp. 90. Each 6d. net.)

[12] *The Public Schools Year Book.* Edited by H. F. W. Deane, M.A., F.S.A., and W. A. Evans, M.A. Twenty-third year of publication. London: The Year Book Press. 1912. (Post 8vo, pp. 750. Price 3s. 6d. net.)

[13] *Medical Gymnastics and Massage for the Treatment of Disease, Deformity, and Injury* By Frederick F. Middleweek, L.R.C.P., L.R.C.S Edin. London: John Bale, Sons, and Danielsson, Ltd. 1912. (Cr 8vo, pp. 40. 2s 6d. net)

MEDICAL AND SURGICAL APPLIANCES.

Forceps for Michel's Clips.

THE illustrations show two pairs of forceps made by Messrs. Allen and Hanburys for Mr. Comyns Berkeley for use with Michel's clips. Fig. 1 shows a pair of forceps for approximating the edges of the wound and for carrying the clips. The teeth of the forceps are wide, so that the surgeon may obtain a firm grip of the cut edges of the wound, and hold these accurately in apposition whilst the clips are being applied. The gallery for carrying the clips is attached to this forceps in such a position that it does not interfere with the fingers holding the instrument, consequently the clips can be removed with the greatest ease. The gallery is made of specially tempered steel, which holds the clips gently but firmly, and they do not slip off after the instrument has been boiled a few times. Fig. 2 is an instrument used for removing the clips from the gallery; it is considered to be an improvement upon the original forceps, being somewhat larger and heavier, and therefore easier to hold, whilst the serrated jaws are grooved, and thus hold the clip firmly and prevent it from dropping.

Fig. 1.

Fig. 2.

Nova et Vetera.

MEDICAL BARONETS, 1645–1911.

May 22nd, 1912, marks the three hundred and first anniversary of the institution of the Baronetcy. Coincidently, there has been established a Bureau or Chancery of the Order, for the purpose of registering genuine titles and excluding fictitious ones. It may be interesting, therefore, to inquire what members of the medical profession have received this hereditary dignity.

Dr. Munk was of opinion—and that learned man always had good reason for his opinions—that James I, when he instituted the order, offered the first patent to his physician, Dr. Henry Atkins.* The offer was declined, probably from financial reasons, as the early baronets, in addition to being gentlemen with £1,000 a year private fortune, were required to maintain thirty soldiers for three years.

To Dr. Munk also is due the credit of pointing out that the first medical baronet was Dr. Edward Greaves, not Sir Hans Sloane, as formerly thought.

The number of baronetcies conferred upon medical men appears so far to have been eighty-seven. Of these twenty-four are now extinct or in abeyance. Five have become merged in peerages—Smithson (Northumberland, D.), Sloane (Cadogan, E.), Pepys (Cottenham, E.) Holland (Knutsford, V.) and Lister (Lister, B.). As to the immediate successors, some have chosen as a profession either the Church, the Bar, or one of the public services; others appear, by the exertions of their illustrious fathers, to have been rendered independent; while in one case the fourth holder of the dignity became an inmate of a metropolitan workhouse. In only six cases—Barry, Broadbent, Christison, Clark, Fayrer, and Laurence—has the son adopted the profession which has been the means of raising his father to hereditary rank, and in no case has this profession been followed in the third generation.

The following list has been compiled from the usual works of reference and verified by reference to the *Complete Baronetage* of Mr. G. E. Cockayne, Clarenceux King of Arms, as far as that work extends. The little list of Jacobite baronetcies has been compiled from the Marquis Ruvigny's work on the subject.

Charles I.

Sir Edward Greaves, premier medical baronet (May 4th, 1645), Physician-in-Ordinary to the King. This baronetcy was conferred while the King was at Oxford. The Civil War being in progress at the time, the patent was never registered at Heralds' College. Hence doubt has been cast upon its reality. The title, however, is now generally conceded, and is admitted by Mr. Cockayne, Clarenceux King of Arms, in his *Complete Baronetage*. Sir Edward left a daughter, but no son.

Charles II.

Sir Alexander Fraser (August 2nd, 1673), Physician-in-Ordinary to the King. This was the physician Pepys refers to as having been so useful to Court ladies in enabling them to "slip their calves." Sir Alexander's son Charles, also a Court physician, is considered to have been the author of *The Turkish Spy in Paris*. The baronetcy became extinct in 1729.

Sir George Wakeman (February 13th, 1660), Physician to Catharine of Braganza, Consort of Charles II. The patent for this baronetcy was engrossed but never sealed. Sir George died, *sine prole*, at Paris in 1690, when the baronetcy became extinct.

Sir Hugh Smithson (August 2nd, 1660), the impoverished grandson of a Yorkshire baronet, (Sir Hugh Smithson of Stanwick), practised as an apothecary in Hatton Garden. He obtained his baronetcy through fidelity to the Royal cause. He married, not altogether with her father's consent, the heiress and only daughter of the Earl of Northumberland. On the death of his father-in-law our apothecary obtained an Act of Parliament enabling him to take the name and arms of Percy.

> No drop of princely Percy's blood
> Through these cold veins doth run.
> With Hotspur's castles, blazon, name,
> I still am poor Smithson.

In 1757 he was created Duke of Northumberland, on which occasion it was suggested that he should replace the strawberry leaves in his coronet by senna leaves!

On the death of his grandfather he inherited a second baronetcy, that of Smithson of Stanwick.

Sir Robert Cuningham (August 3rd, 1673), Physician in Scotland to the King. Extinct by the death of the second holder. This baronetcy was never enrolled, but is admitted by Cockayne.

Sir Andrew Balfour, the eminent botanist. The conference by Charles II of a baronetcy upon this distinguished man depends upon the unsupported statement of Chambers's *Dictionary of Eminent Scotsmen*, no date being assigned for the alleged patent.

George I.

Sir Hans Sloane (April 3rd, 1716), Physician-in-Ordinary to Queen Anne, George I and George II. With the enormous fortune he made by medical fees Sir Hans purchased the Manor of Chelsea. This he left to his daughter Elizabeth, who married Lord Cadogan. Hence the wealth of the Cadogans.

George II.

Sir Edward Hulse (February 7th, 1739), Physician-in Ordinary to Queen Anne, George I and George II. Sir Edward was the first medical baronet to leave an heir to the title. *Present holder*, Sir Edward H. W. Hulse of Breamore, Hants., seventh baronet.

Sir Thomas Molyneux (July 4th, 1730), Physician-General to the Army in Ireland. *Present holder*, Rev. Sir J. C. Molyneux, ninth baronet.

Sir Edward Wilmot (February 15th, 1759), Physician-in-Ordinary to the King. *Present holder*, Captain Sir Ralph Wilmot, sixth baronet.

George III.*

Sir George Baker (August 26th, 1776), Physician-in-Ordinary to the King. This baronetcy is now merged in that of Rhodes.

Sir Edward Barry (August 1st, 1775), Physician-General to the Forces in Ireland. Sir Edward's son, Nathaniel, second baronet, was also a distinguished physician. This baronetcy became extinct on the death of the eighth baronet.

Sir William Duncan (August 4th, 1764), Physician-in-Ordinary to the King. This baronetcy is now extinct.

Sir David Dundas (1815), Serjeant-Surgeon to the King. The King reluctantly conferred this baronetcy upon Dundas, (who had been an apothecary at Richmond) saying "They may make baronets of as many Scotch apothecaries as they please, but I die by the College." This baronetcy is now extinct.

Sir George Elliott (July 29th, 1778), Physician-in-Ordinary to the Prince of Wales. The King, for some reason, disliked Elliott, and resisted the conferring a baronetcy upon him, saying "He shall never be my physician." "Then," said the Minister (the Earl of St. Germains) who proposed the honour, "let him be your Majesty's baronet and my physician." Sir George Elliott left no children. His wife had a daughter named Georgina Augusta, after the Prince of Wales, who claimed parentage (an honour disputed with him by other gentlemen about Court). Lady Elliott eventually eloped with Viscount Valentia. As compensation for the loss of a wife so precious Lord Valentia had to pay Elliott a sum of £12,000 (D.N.B.).

Sir Walter Farquhar (March 1st 1796), Physician to the Prince Regent. *Present holder*, Sir Henry Thomas Farquhar, fourth baronet. The King is also said to have resisted the creation of this baronetcy (Jesse's *Life of George III.*)

Sir Henry Halford, *née* Vaughan (September 27th, 1809), Physician to four successive sovereigns, George III, George IV, William IV, Victoria. Sir Henry Vaughan was created a baronet as above, but on the decease of his relative, Lady Denbigh, widow of Sir Charles Halford, Bart., he inherited the estates of Winstow, and assumed by Act of Parliament the surname and arms of Halford. The baronetcy became extinct on the death of the third baronet.

Sir Caesar Hawkins (July 23rd, 1834), Serjeant-Surgeon. *Present holder*, the Rev. Sir John Caesar Hawkins, Canon of St. Albans.

* See Debrett's *Extinct Baronetage*.

* Dr. Richard Warren, a favourite physician of George III, used to be playfully dubbed by the King "Richardus Warrenensus Baronetensus."

Sir John Macnamara Hayes (February 6th, 1797), Physician-Extraordinary to the Prince of Wales, Inspector-General of the Army. This baronetcy became extinct on the death of the third baronet, the Rev. Sir J. W. Hayes, Rector of Arborfield, Berks.

Sir Everard Home (January 2nd, 1813), Serjeant-Surgeon. Sir Everard left no issue.

Sir Richard Jebb (September 4th, 1778), Physician-Extraordinary to the King, Physician-in-Ordinary to the Prince of Wales. Sir Richard died in 1787, when the baronetcy became extinct. Sir Richard was a great favourite with the King. On one occasion, being sick, His Majesty asked that Jebb should be sent for. On being reminded that it was Court etiquette to send, in the first instance, for the Physician-in-ordinary (Jebb being Physician-Extraordinary), the King replied, "Don't talk to me about your 'Ordinaries' and 'Extraordinaries,' *I want Jebb.*" This baronetcy is now extinct.

Sir William Knighton (January 1st, 1813), Physician-in-Ordinary and Privy Purse to the Prince Regent. This baronetcy appears to have become extinct on the death of Sir William's son.

Sir Francis Milman (December 28th, 1800), Physician-in-Ordinary. *Present holder*, Sir F. J. Milman, late Lieutenant, R.A., fourth baronet.

Sir Lucas Pepys (January 22nd, 1784), Physician-in-Ordinary. This baronetcy has now been merged in the Cottenham Peerage, the present holder being Sir Kenden Pepys, fourth Earl of Cottenham. To this family also belonged the celebrated diarist.

Sir John Pringle (June 5th 1766), Physician-in-Ordinary, Physician-General to the Forces. Sir John married a daughter of the celebrated Dr. Oliver of Bath, but left no descendant.

Sir Matthew John Tierney (January 28th, 1810), Physician-in-Ordinary to the Prince Regent, to George IV and to William IV. Being childless, Sir Matthew obtained a second baronetcy (June 5th, 1834) transmissible to the issue of his brother, Edward Tierney, Esq., of Dublin. The baronetcy, however, is now extinct.

Sir Clifton Wintringham (November 7th, 1774), Physician-in-Ordinary. Sir Clifton died without issue in 1794 when the baronetcy would have become extinct but for a special clause in the patent which conveyed it to the second son of Sir Jarvis Clifton, Bart., of Clifton, Notts.

GEORGE IV.

Sir Gilbert Blane (December 26th, 1812), Physician-in-Ordinary to the King and also to King William IV, President of the Navy Medical Board. *Present holder*, General Sir Seymour John Blane, C.B., third baronet.

Sir Astley Paston Cooper (December 26th, 1812), Serjeant-Surgeon. Sir Astley received his baronetcy after removing from the King's head a sebaceous cyst. *Present holder*, Sir Charles Naunton Paston-Paston Cooper, of Gadebridge Park, Herts, fourth baronet.

Sir Joseph de Courcy Laffan (March 15th, 1828), Physician to H.R.H. the Duke of Kent, Physician to the Forces. This baronetcy is now extinct.

Sir Patrick Macgregor (1831), Serjeant-Surgeon. *Present holder*, Sir Patrick Cyril Macgregor, fifth baronet.

Sir William Russell (April 9th, 1832). Received the baronetcy for services rendered during the great cholera epidemic.* *Present holder*, Sir William Russell, of Charlton Park, co. Gloucester, third baronet.

WILLIAM IV.

Sir Benjamin Collins Brodie (August 30th, 1834), Serjeant-Surgeon. *Present holder*, Sir B. V. S. Brodie, Barrister-at-Law, third baronet.

Sir Charles Mansfield Clarke (September 30th, 1831), Physician to Queen Adelaide. *Present holder*, General Sir Charles Mansfield Clarke, G.C.B., G.C.V.O., third baronet.

Sir Stephen Love Hammick (July 25th, 1834), Surgeon-Extraordinary to the King's Household. *Present holder*, Colonel St. Vincent Alexander Hammick, Oxfordshire Light Infantry, third baronet.

Sir Matthew Tierney. See under George III.

Sir James Macgrigor (1831), K.C.B., Physician-Extraordinary to the King, Director-General of the Army Medical Department. This baronetcy is now extinct.

* This was the epidemic that stopped the University Boat Race.

VICTORIA.

Sir Henry Wentworth Acland (June 16th, 1890), K.C.B., Honorary Physician to King Edward VII. Sir Henry was fourth son of Sir Thomas Dyke Acland, tenth baronet of a 1644 creation. *Present holder*, Admiral Sir W. A. Dyke Acland, second baronet.

Sir William Henry Broadbent (August 10th, 1893), K.C.V.O., Physician-in-Ordinary to the Prince of Wales (King Edward VII). Sir William is succeeded by his son, Sir John Francis Harpin Broadbent, Physician to St. Mary's Hospital, second baronet, who has a son, born 1904.

Sir William Bowman (January 23rd, 1884), a distinguished ophthalmic surgeon. *Present holder*, Sir William Paget Bowman, second baronet.

Sir George Burrows (March 19th, 1874), Physician-in-Ordinary. *Present holder*, Sir Ernest Pennington Burrows, second baronet.

Sir Charles Cameron (August 7th, 1893), M.P.

Sir Andrew Clark (August 9th, 1883). *Present holder*, Colonel Sir James Richardson Andrew Clark, C.B., R.A.M.C., second baronet.

Sir James Clarke (November 11th, 1837), Physician-in-Ordinary. This baronetcy became extinct on the death of Sir John Forbes Clarke, Diplomatic Service, second baronet.

Sir Dominic Corrigan (1866), Physician-in-Ordinary in Ireland. This baronetcy is now extinct.

Sir Phillip Crampton (March 14th, 1839), Surgeon-in-Ordinary in Ireland, Surgeon-General to the Forces. This baronetcy became extinct on the death of Sir John Francis Crampton, K.C.B., second baronet.

Sir Robert Christison (November 28th, 1871), Physician-in-Ordinary in Scotland. *Present holder*, Surgeon-General Sir Alexander Christison, Bengal Army.

Sir John Eric Erichsen (January 1st, 1895), Surgeon Extraordinary. Sir John left no heir.

Sir Joseph Fayrer (February 11th, 1896), K.C.S.I., Honorary Physician, Physician-Extraordinary to King Edward VII, Surgeon-General in the Army. *Present holder*, Lieutenant-Colonel Sir Joseph Fayrer, R.A.M.C., second baronet.

Sir William Fergusson (January 23rd, 1866), Serjeant-Surgeon. *Present holder*, Sir James Rankin Fergusson, Barrister-at-Law, second baronet.

Sir William Withey Gull (February 8th, 1872), Physician-Extraordinary. *Present holder*, Sir William Cameron Gull, Barrister-at-Law, second baronet.

Sir Prescott Gardner Hewett (August 6th, 1883), Serjeant-Surgeon, Surgeon-in-Ordinary to the Prince of Wales (King Edward VII). This baronetcy is now extinct.

Sir Henry Holland (May 10th, 1853), Physician-in-Ordinary. The second baronet, Sir Henry's son, was raised to the Peerage as Viscount Knutsford. His son, the Hon. Sydney Holland, is the well-known Chairman of the London Hospital.

Sir William Jenner (February 24th, 1868), Physician-in-Ordinary. *Present holder*, Sir Walter Kentish William Jenner, late Major, 9th Lancers, second baronet.

Sir William Lawrence (April 30th, 1867) Serjeant-Surgeon. *Present holder*, Sir J. J. Trevor Lawrence, Indian Medical Service, second baronet.

Rt. Hon. Lord Lister (December 26th, 1883), P.C., O.M., Serjeant-Surgeon to the Queen and to the late King Edward. No heir is necessary to perpetuate the name and fame of the noble lord, and none exists.

Sir Charles Locock (May 5th, 1857), Physician-Accoucheur. *Present holder*, Sir Charles Locock, third baronet.

Sir William MacCormac (September 24th, 1897), K.C.V.O., Surgeon-in-Ordinary to the Prince of Wales (King Edward VII). Sir William left no descendant.

Sir Henry Marsh (1839), Physician-in-Ordinary in Ireland. This baronetcy is extinct.

Sir James Paget (August 19th, 1871), Serjeant-Surgeon. *Present holder*, Sir John Rahere Paget, Barrister-at-Law, second baronet.

Sir George Hornidge Porter (June 27th, 1889), Surgeon-in-Ordinary in Ireland. *Present holder*, Sir William Henry Porter, Barrister-at-Law, second baronet.

Sir Richard Douglas Powell (March 5th 1897), K.C.V.O., Physician-in-Ordinary to King Edward VII. *Heir*, Captain Douglas Powell, Royal Welsh Fusiliers.

Sir Richard Quain (January 1st, 1891), Physician-Extraordinary. Sir Richard left no descendant.

Sir James Reid (August 28th, 1897), G.C.V.O., K.C.B., Physician-in-Ordinary to the Queen, to King Edward VII, and to King George V. *Heir*, Edward James Reid, born 1901.

Sir James Russell Reynolds (January 1st, 1895), Physician to the Household. Sir James left no issue.

Sir William Scovell Savory (March 24th, 1890), Serjeant-Surgeon. *Present holder*, Sir William Borrodaile Savory, third baronet.

Sir James Young Simpson (February 3rd, 1866), Physician in Scotland to Her Majesty. *Present holder*, Sir James Walter Simpson, third baronet.

Sir Thomas Smith (September 6th, 1897), Surgeon-Extraordinary. *Present holder*, Sir Thomas Rudolph Hampden Smith, second baronet.

Sir Henry Thompson (February 20th, 1899), Surgeon-Extraordinary to Leopold II, King of the Belgians. *Present holder*, Sir Henry Francis Herbert Thompson, second baronet.

Sir Thomas Watson (June 27th, 1866), Physician-Extraordinary. *Present holder*, Sir Charles Rushworth Watson, third baronet.

Sir Thomas Spencer Wells (May 14th, 1883), Surgeon to the Household. This baronetcy is extinct.

Sir John Williams (October 30th, 1894), Physician-Accoucheur to the Princess of Wales (H.M. Queen Mary). Sir John has no heir.

Sir Samuel Wilks (February 5th, 1898), Physician-Extraordinary. Sir Samuel had no heir.*

Edward VII.

Sir Thomas Barlow (January 1st, 1901), K.C.V.O., Physician to the late King Edward. *Heir*, James Alan Noel Barlow, B.A.Oxon., born 1881.

Sir Thomas Lauder Brunton (July 17th, 1908). *Heir*, James Stopford Lauder Brunton, born 1884.

Sir William Watson Cheyne (July 20th, 1908), C.B., Honorary Surgeon-in-Ordinary to George V. *Heir*, Lieutenant Joseph Lister Cheyne, 16th Lancers.

Sir William Selby Church (June 28th, 1901). *Heir*, John William Church, born 1878.

Sir George Anderson Critchett (November 28th, 1908), Surgeon-Oculist to His Majesty. *Heir*, George Montague Critchett, born 1884.

Sir Dyce Duckworth (July 15th, 1909), Honorary Physician. *Heir*, Edward Dyce Duckworth, Indian Civil Service.

Sir Francis Henry Laking (July 28th, 1902), G.C.V.O., Physician-in-Ordinary to the late King Edward and also to King George V. *Heir*, Guy Laking, Keeper of the King's Armoury.

Sir Henry Morris (July 24th, 1909). Sir Henry has no heir.

Sir Christopher Nixon (July 14th, 1906), Physician-in-Ordinary to the Lord Lieutenant of Ireland. *Heir*, Lieutenant C. W. Nixon, Royal Horse Artillery.

Sir John Burdon-Sanderson (June, 1899). This baronetcy became extinct on Sir John's death.

Sir Frederick Treves (July 30th, 1902), G.C.V.O., C.B., Serjeant-Surgeon to King Edward VII and to King George V. Sir Frederick has a daughter but no son.

George V.

Sir Francis Henry Champneys (July 13th, 1910), Chairman of the Central Midwives Board. *Heir*, John Dalrymple Champneys, born 1889.

Rt. Honble. Sir Leander Starr Jameson (January 1st, 1911), C.B., Member of the House of Assembly, Union of South Africa. Sir Leander is unmarried.

Sir Charles Bent Ball (June 22nd, 1911), Regius Professor of Surgery, Trinity College, Dublin. *Heir*, Charles Arthur Ball, Surgeon to Sir Patrick Dun's Hospital.

Sir Henry Trentham Butlin (June 22nd, 1911). Sir Henry was descended from an old Northamptonshire family, the Boutvileins, of whom Sir William Boutvilian was founder of Pipwell Abbey in the reign of Henry II. In the reign of Edward I the name was spelt Butevillyn. It did not assume its present spelling until late in the seventeenth century. *Present holder*, Sir Henry Guy Trentham Butlin, Trinity College, Cambridge.

Sir James Frederick Goodhart (June 22nd, 1911), Physician to Guy's Hospital and to King Edward's Sanatorium. *Heir*, Ernest Frederick Goodhart, Barrister-at-Law.

Sir William Osler (June 22nd, 1911), Regius Professor of Medicine, University of Oxford. *Heir*, Henry Revers Osler, born 1900.

Sir William Thornley Stoker (June 22nd, 1911), President, Royal College of Surgeons, Ireland. There is no heir to this baronetcy.

Inherited Baronetcies.

The following gentlemen hold, or held, baronetcies of non-medical origin:

Sir Hugh Beevor, Physician to King's College Hospital, descends from Sir Thomas Beevor, created a baronet in 1784.

Sir Thomas Colt, M.D., who died near Torquay in 1893, was seventh in descent from Sir Harry Dutton Colt, created a baronet in 1694. The present holder of the dignity is a clergyman, but the heir-presumptive is Dr. Archer Colt of Southsea.

Sir Richard Croft, who attended the Princess of Wales, wife of the Prince Regent, in her unfortunate confinement, was sixth in descent from Sir Herbert Croft, created a baronet in 1671. The death of the Princess and of her infant so distressed Sir Richard that, notwithstanding every consideration shown him by the Royal Family, he terminated his own existence six weeks later.

Sir Thomas Grey Cullum, a member of the old Corporation of Surgeons (1778) who practised in Bury St. Edmunds, was the seventh holder of a baronetcy of early creation.

Sir Alexander Dick, President in 1756 of the Royal College of Physicians of Edinburgh, was third in descent from Sir James Dick, created a Nova Scotia baronet in 1677.

Sir Alexander Douglas, M.D., 1760, who lived in Dundee, inherited the baronetcy conferred upon his father, a noted historian.

The Rev. Sir James Stonhouse, M.D., for more than twenty years Physician to the Northampton Infirmary, and who afterwards, in 1763, took holy orders, was the eleventh holder of a baronetcy created in 1628.

Sir William Hicks Farrington, M.D., who died at Penhurst in 1901, was fifth in descent from General Sir Anthony Farrington, created a baronet in 1818. Dr. Anthony Farrington of Saxmundham is possible, but not presumptive, heir to this dignity.

Sir George Hampson, M.D., who died in 1724, succeeded to the baronetcy conferred upon his grandfather in 1643.

Sir James Hay, M.D., of Peebles, inherited in 1805 the Nova Scotia baronetcy conferred on his great-great-grandfather by James IV.

Sir Henry Northcote, M.D., born in 1665, was the fourth baronet in a line of which Sir Stafford Northcote, the celebrated statesman, was the eighth.

Lieutenant-Colonel Sir Augustus Alexander Brooke-Pechell, R.A.M.C., is seventh in descent from Colonel Paul Pechell, created a baronet in 1797.

Sir Stuart Threipland, M.D., of Fingask, assumed the baronetcy forfeited by his father for complicity in the rebellion of 1715. Sir Stuart himself was complicated in the rebellion of 1745 and fled the country, but was restored by the Act of Indemnity.

Sir Alexander Douglas, founder of the Edinburgh Dispensary, was seventh in descent from Sir William Douglas, created a baronet in 1625.

Jacobite Baronets.

The following were conferred by "Charles III" in exile:

Dr. Higgins, First Physician to the King of Spain, was created a "baronet," May 6th, 1726.

John Macleod was created a baronet in 1723. His descendants were (1) "Sir" John, M.D., died 1811; (2) "Sir" John, Physician to the Forces in Spain.

Baronetcies Refused.

Excluding recent instances, the following are known to have refused the honour: Abernethy, Atkins, Mathew Baillie, Heberden, Holland, (when first offered in 1841), and Radcliffe.

S. D. Clippingdale, M.D.

*Sir Samuel, on receiving the baronetcy, humorously remarked that only three persons bearing the name "Samuel" had ever obtained eminence. These were the prophet, the writer of the dictionary, and the younger Mr. Weller.

PARLIAMENTARY COMMITTEE ON PROPRIETARY MEDICINES.

THE Select Committee of the House of Commons appointed to consider the law and advertisement of proprietary articles continued its sittings on May 16th, Sir Henry Norman presiding. The taking of evidence on behalf of Government departments and official bodies was resumed.

THE HOME OFFICE.

Mr. G. A. Aitken, a principal clerk at the Home Office, in charge of the department in which the subject of proprietary medicines is dealt with, gave evidence as to the position and authority of the Home Secretary in regard to proprietary medicines. He explained that the Home Secretary's position was parliamentary and not administrative; the Home Secretary answered questions in the House of Commons on behalf of the Lord President of the Council, the Council Office having no representative in the House of Commons. The Home Secretary had no powers with regard to the subject as a whole; he was interested in certain aspects.

The Chairman: We are anxious to know what powers he has. We have had some difficulty in finding out what official individual has knowledge or authority in this matter.

The Witness: As regards patent medicines as such the Home Secretary has no powers or duties. The witness added that the Home Office had received very little correspondence on the subject apart from memorials addressed to it from time to time by the Royal College of Physicians. It had been suggested that patent medicines should be brought within the scope of the section of the Food and Drugs Act, 1875, which imposed a penalty if an article was not of the nature, substance, and quality demanded by the purchaser; but there was an obvious difficulty in doing that, because it would be necessary to prove that the nature, quality, and substance demanded had not been given. He presumed it would be difficult to fix any chemical standard for a proprietary medicine.

The Home Office had also received some complaints as to the attitude of the press. The popular daily papers, religious papers, cheap magazines, Sunday papers perhaps most of all, and some provincial papers, were thought to be greatly in fault in accepting quack advertisements. Some newspapers, according to the BRITISH MEDICAL JOURNAL, refused to insert advertisements of a book exposing secret remedies. The view of the Home Office has been that the advertisement and extensive sale of proprietary medicines was a mischief, but that it was an evil that must be met rather by the spread of education than by legislation. The complaints just mentioned were received from private individuals; they only numbered a few, but one naturally saw newspapers personally and formed some opinion. The Home Office had received very few complaints of fraud. Proceedings for fraud against vendors of proprietary medicines on the ground that they could not effect the cures claimed in their advertisements were practically unknown. The onus was upon people who thought they had been defrauded in this or any other matter to prosecute. The police were not in any way bound to prosecute, and the Director of Public Prosecutions would take proceedings only in cases of quite exceptional importance, where he thought it was necessary to meet the ends of justice. The difficulty of proving fraud in these cases had been found almost insuperable. This had been brought out very well in the well-known Harness case tried in 1893–94. (BRITISH MEDICAL JOURNAL, vol. i, 1894.) Those were proceedings by private people against the vendor of a specific, the charge being that he had unlawfully conspired by false advertisements to defraud, and that he had obtained certain moneys by fraud. Doctors and others came forward to say that the remedy could not possibly cure the diseases it was said to do. But the defence called a large number of persons of respectability who declared that they had been cured, and the result was that the case was dismissed. The magistrate said that, although the management had some reason to believe in the value of their appliance they must have known that it could not be successful in every case. But to make the case indictable there must not only be knowledge, but guilty knowledge. These people received testimonials, and how would it be possible to say that they knew their appliance to be valueless?

The Home Office was cognizant of some separate aspects of the question in connexion with various branches of its work. The Home Office received recommendations to try advertised cures for inebriety in inebriate reformatories; it had, however, not done so. Although these cures might be good for certain patients, the Home Office was advised that the persons who had benefited wished particularly to be cured of their habit, and that was by no means always the case with persons who were convicted and sent to reformatories. The Home Office felt that it would be wrong in using these cures in institutions where these people were received. The Home Secretary was also concerned with the question of proprietary remedies in relation to the use of medicine and appliances for illegal purposes. These came to his knowledge in connexion chiefly with proposals for legislation, but also in the form of complaints from the public. Many difficulties had been found in attempting to frame any measure in regard to what were described as female ailments which would be satisfactory, and neither inoperative nor too wide in its scope. The advertisements which suggested illegal practices were usually framed in carefully veiled language, and in many cases the drugs were so innocuous that it would be impossible to prosecute successfully. It was held by Mr. Justice Darling in 1889 that a charge against a vendor of drugs for this purpose could not be sustained if the drug was in fact, and in the knowledge of the accused, harmless, although, of course, he advertised it as effectual. The Joint Committee which reported in 1908 on lotteries and indecent advertisements recommended that the advertisement and sale of drugs or articles which might be reasonably considered as intended for promoting miscarriage or securing abortion should be made illegal. The Home Secretary already had a bill in draft on the lines of the report of that Select Committee, but whether time would be found this session to carry it into law remained to be seen. The bill carried out the recommendation of the Joint Committee, which made it an offence to publish any advertisement, except in a bona fide medical or pharmaceutical periodical, which suggested directly or indirectly the taking of any drug or thing for the purpose of securing miscarriage or abortion. In other words, it removed the difficulty that at present these things could only be proceeded against when the language used in the advertisement was indecent. As a rule the language was carefully veiled, and could not be called indecent. The bill had been in draft two years.

The difficulty in these matters was to get any one to give evidence. An unsuccessful prosecution did considerable harm in advertising the article. The chance of getting a conviction depended to some extent on the class of person to whom the advertisement was sent. It was much easier to secure a conviction if the advertisements were sent to young persons than to adults. The Director of Public Prosecutions made frequent use of the Post Office Act of 1908, section 63, which made it an offence to send indecent or obscene articles through the post. A man was recently convicted for sending notices about preventives to people whose engagements had been announced in newspapers. He had been in the habit of sending them to people whose marriages had been announced. The Director of Public Prosecutions always took up cases of procuring abortion by means of instruments whenever he thought the evidence would justify it.

In reply to a question, the witness expressed the opinion that Mr. Justice Darling's judgement referred to above only related to drugs used to prevent conception. Replying to the Chairman, he said that if a member of the public wrote complaining the Home Office would refer the case to the local police for inquiry, or to the Director of Public Prosecutions. The Home Secretary did not as a rule decide what criminal cases should be instituted. The police for many years had not taken action against the vendors of proprietary medicines on the ground of fraud. There would not be any other ground on which they could take action except indecency.

The Chairman: In the present state of the law, the sale and advertisement of a medicine for an obviously illegal, and no other, purpose cannot be made the subject of prosecution so long as that advertisement is covered in decent language?—I think that is the fact.

Have there been any examples of the police taking

action on their own account during recent years in matters of this kind?—No, hardly any.

Sir Philip Magnus asked if it was the witness's view that the Home Office could not interfere with the sale of medicines advertised to cure ailments which it was well known they could not possibly cure.

The witness said he did not think the Home Secretary would take action unless it was a very extreme case, and then he would ask the Director of Public Prosecutions to consider it. He did not think such a case had ever arisen.

In reply to Dr. Lynch, the witness said he had no means of ascertaining how much money was spent annually by the public upon proprietary medicines.

Dr. Lynch: Is there in the Home Office any particular officer whose duty it is to exercise an active vigilance—not merely to wait for complaints to be made—but to take action on his own initiative with regard to frauds on the public, or the vending of drugs for illegal purposes?

The Witness: I think the answer is that the Home Office can only wait until it gets information from one source or another. In reply to a further question, he did not see any difficulty in establishing a warranty in regard to proprietary medicines. He thought new legislation might proceed somewhat on the lines of the Food and Drugs Act, giving the local authorities powers and duties to examine proprietary medicines. The Home Office had no definite knowledge, but it believed that the sale of abortifacients was increasing.

Dr. Lynch: Do you think it possible to frame a bill that would meet fairly and squarely the evil of frauds upon the public by selling at comparatively high prices worthless medicines, or the evil of inciting to illegal operation?—I think we could meet the latter part of your question; I am not so sure about the former.

In reply to Dr. Chapple, the witness said prosecutions were rare, not because the evil did not exist, but because it was so difficult to secure a conviction. The Home Office found itself powerless to a great extent to prevent these evils.

In reply to Mr. Lawson, the witness said that it was possible to prosecute vendors under existing laws where there was evidence of fraud, but it was exceedingly difficult to obtain a conviction. He agreed that no amendment of the law in the direction of causing the formulas of the articles to be placed on the labels would help in any way. He did not agree that the Home Office view was that there was no necessity for further legislation. The outstanding difficulty in the way of obtaining convictions was that many people believed they had benefited, and evidence could be produced to that effect. He could not suggest any amendment of the law which would make it easier to obtain a conviction.

Mr. Glyn Jones: Do you know any department of the Government which can give information covering the general scope of this inquiry?—No.

Do you agree that no such official or department exists?—Yes. In reply to a further question, the witness said that there were no separate statistics as to prosecutions of vendors of proprietary articles or of fatalities due to their use.

Mr. Glyn Jones asked if the witness knew of any other Government department or official that should be consulted by the Select Committee in addition to those already heard, and the reply was in the negative; whereupon the Chairman of the Committee remarked that the proceedings were taking the shape of a fishing inquiry. The Committee found itself in some embarrassment as to what source it should apply for information.

The Chairman: Do you think it would be to the public advantage that there should be a general law on this subject?—Yes, I think it would.

Have I gathered correctly from your evidence that the Home Office never acts except when moved by somebody outside, and very seldom then?—No, I do not think that is a correct inference from what I said.

But you have said the Home Secretary's position is not administrative, and you have given very few examples when he has acted.—That is so as regards proprietary medicines.

Should I be correct in saying that in the matter of proprietary medicines the Home Secretary practically does nothing at all except answer questions in Parliament on behalf of the Privy Council?—Yes; he does not regard it as coming within his jurisdiction at all.

The "British Pharmacopoeia."

Dr. Nestor Tirard, medical expert to the British Pharmacopoeia Committee of the General Medical Council, gave evidence as to the attitude of the Council, and explained that it was the censor of the standard and purity of drugs employed by medical men. For the purpose of the *Pharmacopoeia* the Council had to know what drugs were employed and recommended from time to time, in accordance with alterations of practice or suggestions from pharmacists for improvements in preparations. The *Pharmacopoeia* did not concern itself with any so-called secret or proprietary medicines. At the suggestion of the Chairman, the witness explained for the benefit of lay members of the Committee the objects of the *British Pharmacopoeia* and the authority conferred upon it by statute. Its purpose was to secure a uniform standard in drugs and also their purity. The work was revised and republished in accordance with an Act of Parliament whenever the Committee thought necessary, and the witness did not think it was revised sufficiently often. The last edition was published in 1898, and another was about to be issued.

The Chairman: Then the medicines discovered or synthetically made since 1898 have had no attention?

The Witness: They have to gain general acceptance to be taken notice of in the *Pharmacopoeia*.

Sir Philip Magnus: Your Council endeavours to keep fully informed of recent advances?—That is so.

But they keep the knowledge to themselves sometimes for fourteen years?—If there was any great change we should issue another volume. It is not always fourteen years before another volume is issued.

The Chairman: Are we to infer that during the last fourteen years there have not been many important changes?—Not sufficient to necessitate the issue of a new authority.

The witness proceeded to explain the attitude of the General Medical Council towards proprietary medicines. If it was found from analysis that a proprietary preparation contained a scheduled poison, such as morphine, strychnine, or mercury, when an edition of the *Pharmacopoeia* was made a formula for a substance analogous to this was introduced, the idea being to safeguard the public as regards any possible changes of strength. For instance, an equivalent formula to that of chlorodyne was included in the *Pharmacopoeia*; it was not identical, but by introducing it a definite quantity of the poisonous ingredient was established. Particulars of the ingredients of proprietary medicines were obtained either from the proprietor or by analysis. The object of including the formula in the *Pharmacopoeia* was not that it should be used as a substitute for a proprietary article. It was thought that medical men might prefer a substance of constant strength. Variations of strength were dangerous in many instances. In the case of chlorodyne the Board of Trade stated that it was not always supplied by chemists, but sometimes by wholesale firms, ships' chandlers, and others. In the case of a ship with no doctor on board, if the captain got in the habit of using a weak form of the drug in comparatively large doses, when he received a fresh supply of chlorodyne of a good type there was danger from overdoses.

The Chairman: Suppose some person devises a new combination of drugs which is of a useful and entirely legitimate character and advertises and sells it as a proprietary article, do I understand that the General Medical Council proceeds to analyse this and makes up something to all intents and purposes identical, thus enabling any person to use this combination which the genius and medical knowledge of an individual has enabled him to produce?

The Witness: We do not think there is any great discovery in putting together different drugs. Proceeding, the witness remarked that the genesis of nearly every proprietary medicine was a prescription of a medical man. Much assistance was received by the compilers of the *British Pharmacopoeia* from the Therapeutic Committee of the British Medical Association and from the Pharmaceutical Society. Information for a new issue of the *Pharmacopoeia* was collated, and the drugs most commonly prescribed were tabulated. A certain number of

proprietary medicines occurred in the final list; there were some medical men who, for reasons best known to themselves, preferred to prescribe outside the *Pharmacopoeia;* but because some medical men prescribed the latest preparation on the market was no reason for including it in the *Pharmacopoeia*.

In reply to Sir Henry Dalziel, the witness said the General Medical Council had nothing to do with patent medicines. The Council had no wish to suppress proprietary medicines, some of which—the synthetic preparations—were the result of advancing knowledge. Nevertheless, he would be glad if the Committee could see its way to insist, not on a statement of the full composition of the article being stated on the label, but that when a scheduled poison was present the amount should be definitely stated.

Replying to Mr. Glyn Jones, the witness agreed that the ascertaining of the value of new drugs was left to private enterprise; the Therapeutic Committee of the British Medical Association was the body to which the compilers of the *Pharmacopoeia* were mainly indebted. There were a large number of instances of doctors ordering proprietary medicines. In the nature of things the testing of drugs was a private matter. It depended upon the effect upon individual patients of the drugs prescribed by a doctor.

In reply to the Chairman, the witness said that the statement on the label of the exact amount of a scheduled poison contained in the bottle would convey nothing to the public, but it would be of value to the medical profession as establishing a constant strength.

The Committee adjourned until Thursday, June 6th.

THE MEDICAL PROFESSION IN THE ISLE OF WIGHT.

IN the JOURNAL of May 11th, p. 1082, it was announced that Dr. Barford, who had held the appointment only for a short time, had resigned the office of county medical officer of health and school medical officer. About a year ago the County Council of the Isle of Wight, by a small majority, took a course which, in the opinion of the Isle of Wight Division of the British Medical Association, inflicted a grave injustice upon a medical man who had served the island both faithfully and well, and offered the joint post, which Dr. Barford has now resigned, at a salary regarded as quite inadequate, not only by the local profession but by the profession at large. Dr. Barford indicated that he resigned on the ground that he had not got the hearty co-operation of the district medical officers of health, and of the local practitioners, which was necessary for the efficient discharge of the duties of the combined office. The information supplied to him by the British Medical Association had proved correct.

In view of the vacancy again created, the Isle of Wight Division has addressed the following letter to the Chairman of the Isle of Wight County Council:

The Chairman, the Isle of Wight County Council.

Sir,

We beg most respectfully again to approach the Council on the subject of the terms of remuneration which are being offered for a medical officer of health and school medical officer for the County of the Isle of Wight.

We consider the proposed terms in question to be absolutely inadequate, considering the responsible nature of the work of the appointment and the serious difficulties in connexion with locomotion in the Isle of Wight, not to mention the amount of clerical work involved. At a meeting of the Isle of Wight Division of the British Medical Association, held in Sandown to-day, we have seriously considered and discussed the subject fully, and we are anxious that the county medical officer of health for the Isle of Wight should have the co-operation of the district medical officers and also of the private practitioners of the island, as is recommended by the Local Government Board, *but we cannot recede from our previous opinion that £500 net should be the minimum salary.* We would, however, venture to remind you that, so long as the advertisement of the post is of such a nature that it is refused by the leading medical journals, your choice of candidates must of necessity be extremely limited, and that you will thus have no prospect whatever of getting the best man for the post or one with whom the other members of the profession could co-operate.

These are serious considerations from the point of view of the public health, and we maintain that the medical profession must by its special knowledge be enabled to judge of the health requirements of the community better than it is possible for a Committee which has no doctor amongst its members. We would also wish to draw your attention to the fact that in the short period of twelve months one medical practitioner has refused the work and another has resigned. Is this in the best interests of the community? Is it not better that there should be more continuity of service? We understand that you consider £50 per annum to be an ample allowance for travelling expenses, but cannot understand how such an estimate can be arrived at.

No doubt it is possible that you may find some one who will do, or attempt to do, the work on the terms proposed, but it will be quite impossible for him to be such a one as may be entitled to expect to have the co-operation of the medical profession either of the island or elsewhere. The Council would thus have carried out the letter of the law but not its spirit.

Trusting that you will be able to see your way, in the interests of the public, to reconsider this matter,

I am, Sir,

Yours faithfully,

G. BENINGTON WOOD,
Hon. Sec. I.W. Division, British Medical Association.

P.S.—Would it be possible for you to arrange that a deputation of medical practitioners should wait on some representatives of the Council?

Sandown, May 17th, 1912.

THE MENTAL DEFICIENCY BILL.

IN the fullness of time, nearly four years subsequent to the publication of the Report of the Royal Commission on the Care and Control of the Feeble-minded, appointed so long ago as November, 1904, by Mr. Balfour, the present Government has laid upon the table of the House of Commons "A Bill to make Further and Better Provision with Respect to Feeble-minded and other Mentally Defective Persons." Its short title is "Mental Deficiency Bill." Stimulated, no doubt, by the marked growth of public interest in the question, as well as by the introduction of two private members' bills on the subject, one of which, the "Feeble-minded Persons (Control) Bill," through good luck in the ballot, came on for second reading on May 17th, the Home Secretary hastened the printing of the Government measure so that it might be in the hands of members prior to the debate on that bill.

The bill of the Government consists of 68 clauses, and is divided into four parts, the first setting up central and local authorities for the purposes of the Act, the second prescribing the method of dealing with mentally defective persons, the third regulating certification and provision of institutions, and the fourth containing general provisions with reference to offences, legal proceedings, etc. The Act is to apply to England and Wales, and, with certain modifications, to Scotland.

I. *Central and Local Authorities.*

Part I institutes a new central authority consisting of not more than six Commissioners (one at least to be a woman), to be designated "the Commissioners for the Care of the Mentally Defective," not more than four of whom are to be paid Commissioners. They are to be assisted in the performance of their duties by a secretary and by such inspectors and other officers and servants as the Secretary of State may approve. No qualification is laid down, as is the case with regard to the Lunacy Commission, for appointment as a Commissioner, except the negative one that the person appointed must not be interested in any certified institution or home for defectives.

The general powers and duties of the Commissioners are stated to be:

1. The general supervision, protection, and control over defectives.
2. The co-ordination and supervision of the administration by local authorities of their powers under the Act.
3. The certification, supervision, and inspection of institutions and houses for defectives.
4. Visitation of the defectives in institutions and houses

for defectives, or under guardianship, or (with a view to their certification) elsewhere.

5. The provision and maintenance of institutions for defectives of criminal, dangerous, or violent propensities; and

6. The making of reports and the administration of Parliamentary grants under the Act.

As regards local administration, committees for the care of defectives are to be appointed by county councils or county borough councils in England and Wales, and by District Boards of Lunacy in Scotland; and they are to appoint one or more specially qualified medical officers to assist them in the performance of their duties under the Act. These duties are specified as follows:

(*a*) To ascertain what persons in their area (other than educable defective children under 16 years of age provided for under the Elementary Education (Defective and Epileptic Children) Act, 1899) are subject to be dealt with as defectives under the Act;
(*b*) To take the necessary steps for their supervision, or control under guardianship or in institutions;
(*c*) To keep registers of defectives;
(*d*) To provide suitable and sufficient accommodation for persons sent to institutions under the Act;
(*e*) To appoint the necessary officials to assist in the carrying out of their statutory duties;
(*f*) To make annual and other reports to the Commissioners.

There are certain reservations with regard to defectives dealt with under the Lunacy Acts or the Poor Law.

II. *Method of Dealing with Mentally Defective Persons.*

Part II opens with the following clause (17):

Save as expressly provided by this Act, the following persons, and no others, shall be subject to be dealt with under this Act—that is to say, persons who are defectives and—

(*a*) Who are found wandering about neglected, or cruelly treated;
(*b*) Who are charged with the commission of any crime, or are undergoing imprisonment or penal servitude or detention in a place of detention, or a reformatory, or industrial school, or an inebriate reformatory;
(*c*) Who are habitual drunkards within the meaning of the Inebriates Acts, 1879 to 1900;
(*d*) In whose case, being children discharged on attaining the age of 16 from a special school or class established under the Elementary Education (Defective and Epileptic Children) Act, 1899, such notice has been given by the local education authority as is hereinafter mentioned;
(*e*) In whose case it is desirable, in the interests of the community, that they should be deprived of the opportunity of procreating children;
(*f*) In whose case such other circumstances exist as may be specified in any order made by the Secretary of State, as being circumstances which make it desirable that they should be subject to be dealt with under this Act.

To this follow definitions of the several classes of persons to be deemed defectives, including idiots, imbeciles, feeble-minded, moral imbeciles, and mentally infirm persons suffering from senile decay of their faculties. These definitions follow closely those given in the Recommendations of the Royal Commissioners.

Notification of cases believed to be defective within the meaning of the Act is to be made to the local authority by certain public officials, including Poor Law medical officers and medical officers of health, and a "defective subject" may be (*a*) sent or transferred to and detained in an institution for defectives; or (*b*) placed under guardianship. Any relative or friend of an alleged defective may also make private application (as well as a specially authorized officer of the local authority) to the judicial authority empowered to deal with such cases, and on the latter being satisfied after receiving the petition accompanied by two medical certificates, or in certain circumstances by a statutory declaration signed by the petitioner and by at least one other person, the judicial authority may make an order sending the alleged defective to an appropriate institution for defectives, or appointing a suitable person to be his guardian.

Provision is made for dealing with children discharged from special schools needing further care by empowering the Education Committee to notify the local authority that the child has been discharged from the school, having reached the age of 16, and that it would be for its benefit to be sent to an institution or placed under guardianship. The local authority may thereupon take the necessary steps for causing the child to be dealt with under the Act, and the parent or guardian of a defective who is under the age of 21 may voluntarily place him in an institution or under guardianship, if the case be duly certified by a medical practitioner.

All orders made under the Act expire at the end of a year from their date, but provision is made for their continuation on report.

III. *Certification, Provision, and Management of Institutions.*

Part III deals with the provision of State institutions for defectives of criminal, dangerous, or violent propensities, and with the certification of institutions; local authorities are given power, either jointly or separately, to establish institutions or to contribute to those established by others. Towards the expenses of persons detained in certified institutions for defectives Parliament is to provide a yearly grant of not more than £150,000; and societies assisting in the care of defectives may also be aided by parliamentary grants.

Provisions are made for the certifying of houses in which defectives may be received for private profit.

IV. *General.*

Part IV deals with penalties imposed on those taking charge, for reward, of more than two defective persons elsewhere than in a certified house or institution, for ill-treatment of defectives by relatives or those in charge of them, and for breach of regulations.

Clause 50 marks a new departure in British legislation in the direction of negative eugenics, and deserves to be quoted at length. It enacts that

If any person intermarries with, or attempts to intermarry with, any person whom he knows to be a defective within the meaning of this Act, or if any person solemnizes or procures or connives at any marriage knowing that one of the parties thereto is a defective, he shall be guilty of a misdemeanour.

The distinction between "misdemeanour" and "felony" is of old standing. According to Lord Halsbury's *Laws of England* all indictable crimes below the degree of treason are either felonies or misdemeanours. The main distinction now extant is that on a charge of felony a person may be arrested without a warrant, whereas in misdemeanour there is no power to arrest without a warrant, except in some cases. Again, a person accused of felony has no absolute right to bail, whereas a person charged with misdemeanour may obtain bail from a judge of the High Court. Subject to these observations the distinction between felony and misdemeanour is largely reflected in the punishment which the court is entitled to inflict. By Clause 56 an offence declared to be a misdemeanour under the Mental Deficiency Bill is punishable by fine or by imprisonment not exceeding two years, with or without hard labour; but the accused may, instead of being prosecuted on indictment, be prosecuted summarily, and if so prosecuted shall be punishable only with imprisonment for a term not exceeding three months, with or without hard labour, or with a fine not exceeding £50.

The Act is to apply to Scotland, subject to the modifications made necessary by differences in administrative methods, but not to Ireland. If passed this year it would come into operation on January 1st, 1913.

THE report of the Kashmir Medical Mission for 1911 records the performance during the year of as many as 6,000 major and minor operations—an immense number, considering that the staff comprises only four qualified medical men. About one-fourth of the operations were eye operations, while the tumours dealt with included as many as 85 kangri burn cancers. Tuberculosis is stated to be very greatly on the increase, and the number of operations on tuberculous glands to have exceeded 100.

THE KING AND THE ROYAL SOCIETY OF MEDICINE.

OPENING OF THE NEW BUILDING.

THE new buildings in Wimpole Street, W., of the Royal Society of Medicine, which have been erected to house the library, to provide central quarters for the officers and Council, and rooms for the meetings of the various sections, were opened by His Majesty the King, accompanied by Her Majesty the Queen, on Tuesday, May 21st.

The principal feature of the new building, which, architecturally, is an example of the Greek revival in England, is the library—a handsome apartment 110 ft. long by 27 ft. wide and 18 ft. in height. The design of the building provides for another story, and until this is added the structure must necessarily lose something of its dignity. On the ground floor are a handsome and spacious vestibule, two meeting halls (holding 500 and 250 persons respectively), patients' rooms (for both sexes), cloak rooms, and cashier's and porters' rooms. The whole of the first floor is taken up by the library and by the offices of the secretary, editor, and clerks. The main part of the second floor is occupied by the council room and by two committee rooms. On the third floor is a museum and laboratory. The whole of the basement is given up to a book store-room, where specially constructed iron book stacks permit of the storage of the 100,000 volumes comprising the library with the greatest possible economy of space. Many novel features are employed in the fittings of the premises. The lavatories are fitted with the Ajax system of Dr. C. A. James, and there is a commodious lift of open construction. The ceiling lamps in the library are so arranged that light is reflected upward and then downward by the white ceiling. The floors in the meeting halls slope towards the platform.

A large and distinguished assembly awaited the arrival of Their Majesties, who were received on alighting from their carriage by the President, Sir Henry Morris, the Honorary Secretaries, Dr. Arthur Latham and Mr. H. S. Pendlebury, and the Secretary, Mr. J. Y. W. MacAlister. The members of the Council and of the Building Committee waited on either side of the entrance hall. As Her Majesty entered the building she was presented with a bouquet by Mrs. Arthur Latham. Their Majesties proceeded to the Robert Barnes hall, where the President read the following address:

To the King's and the Queen's Most Excellent Majesties.

May it please Your Majesties,

We, the President, Council, and Fellows of the Royal Society of Medicine, desire to convey to Your Majesties, with our loyal duty, our attachment and devotion to Your Persons and to the Throne.

We take this opportunity to express our grateful appreciation of the deep interest which Your Majesties invariably evince in all that concerns the wellbeing of Your Subjects, as well as in the progress of our profession, whose vocation is not only to preserve the individual by curing disease, but to improve the health of the nation by promoting hygiene, and preventing illness.

Our Society was founded in the year 1805, but greater stability and effect were given to its designs by the Charter granted in 1834 by the special grace of His Majesty, King William IV, who thereby declared himself, "and his successors if they shall think fit," the Patron of the Society.

It is our pride and privilege to record that each of the illustrious Successors of King William IV has so thought fit, and that our greatly beloved, and never to be forgotten late Sovereigns, Her Majesty Queen Victoria and His Majesty King Edward VII, have been, and now your own Excellent Majesty is our Patron.

By a Supplementary Charter graciously granted in the year 1907 by Your Majesty's august Father, the Society was empowered to enrol as Fellows the members of several younger Societies having allied objects; the scope of the Society was enlarged; its name was changed from "The Royal Medical and Chirurgical Society of London" to "The Royal Society of Medicine"; and it was specifically ordained that female as well as male persons might be elected Fellows and appointed to offices of the Society.

Thus the Royal Society of Medicine now forms a large Corporation, embracing within its fold the most important Medical Societies in the country, and having for its object the improvement of the art and science of medicine in all branches by means of debate, collaboration, and research.

Your Majesties, who at all times show very active sympathy in the work of the great hospitals and similar institutions, and in everything that tends to alleviate sickness and relieve suffering, take also, as we are well aware, a keen and enlightened interest in every advancement of medical knowledge directed to the furtherance of these humane ends. Such progress is the single purpose of this Society.

To have been distinguished by the gracious favour of Your Majesties on this auspicious occasion has given inexpressible pleasure to all concerned, and is a recognition that reflects the brightest lustre upon the History of the Society.

It is with these feelings of appreciation and gratitude that we very earnestly thank Your Majesties for the great honour you have conferred upon us, and upon the profession at large, by Your Presence here to-day.

HENRY MORRIS,
President.
WILLIAM S. CHURCH,
FRANCIS H. CHAMPNEYS,
Honorary Treasurers.
R. J. GODLEE,
NORMAN MOORE,
Honorary Librarians.
ARTHUR LATHAM,
HERBERT S. PENDLEBURY,
Honorary Secretaries.
J. Y. W. MACALISTER,
Secretary.

HIS MAJESTY replied:

I thank you on behalf of the Queen and myself for the loyal and dutiful address of the Royal Society of Medicine. It gives me great pleasure to open the fine building which will henceforth be the home of the Society, and which will provide adequately for the increase in your membership and for the extension of your duties since a new and enlarged charter was granted to you by my father, King Edward.

The importance of the Society's work is now universally recognized, and it is a matter of satisfaction that the needs of the Society have been so generously provided for, and that its varied functions can now be carried on unhampered by lack of space. The health and well-being of the community are safeguarded by the energies of the medical profession. We look to you to fight sickness and disease; and we claim from you an untiring vigilance in this contest, and unceasing efforts to find, by the investigation of the laws of nature, new means of combating these enemies. Medical science has revealed by experiment and trained observation new securities for life and health during recent years, and none can doubt that the improved public health is mainly due to the discoveries made by the medical profession in this and other countries, to the guidance given by that profession to the civil authorities, and to the sanitary precautions against the spread of disease which they have enforced. It gives us the greatest satisfaction to assist in any way the interests of your noble calling, and the Queen and I will ever watch the progress of your Society with sympathy and hearty goodwill.

It only remains for me to declare this new building opened, which I do with the greatest satisfaction and pleasure.

Their Majesties next proceeded to the basement, the King having expressed a special desire to examine the book store. The Honorary Librarians, Mr. Rickman J. Godlee and Dr. Norman Moore, conducted Their Majesties through this department. Returning to the first floor, the King and Queen entered the library, where the second part of the opening ceremony took place.

The following members of the Council were presented to the King and Queen by Sir Henry Morris (the President of the Society): Sir William S. Church, Sir Francis H. Champneys, Mr. J. Warrington Haward, Dr. Frederick Taylor, Mr. Clinton T. Dent, Dr. Amand Routh, Dr. R. T. Hewlett, Dr. Theodore Thomson, Mr. H. Lloyd Williams, Sir William Osler, Sir Malcolm Morris, Dr. George H. Thompson, Dr. F. W. Mott, Dr. StClair Thomson, Dr. W. J. McCardie, Mr. Richard Gill, Dr. William Milligan, Mr. Arthur H. Cheatle, Dr. G. A. Sutherland, Mr. A. D.

Reid, Dr. W. Deane Butcher, Dr. W. E. Dixon, Dr. R. A. Gibbons, Dr. W. P. Herringham, Mr. R. Clement Lucas, Mr. D'Arcy Power, Dr. H. D. Rolleston, Mr. Charters J. Symonds, and Mr. E. F. White. The following members of the Building Committee who are not on the Council were then presented: Dr. Herbert R. Spencer, Dr. C. Theodore Williams, Dr. Leonard L. B. Williams; and also the architect (Mr. John Belcher), the representative of Lady Fellows (Mrs. Scharlieb), and the Editor of the Society's *Proceedings*.

Their Majesties were then conducted round the library by Sir Henry Morris, Mr. R. J. Godlee, Dr. Norman Moore, Dr. Arthur Latham, Mr. Herbert S. Pendlebury, and Mr. J. Y. W. MacAlister. One of the first things which attracted the attention of the King was a novel electric lighting arrangement for writing tables, the invention of the Secretary. Having realized the inconvenience of the flexible cord which has hitherto been used for supplying the electric current to table lamps Mr. MacAlister devised a small apparatus which entirely does away with the old form of standard lamp attachment. It consists of a socket in the floor connected with the source of electric supply and a plug in the leg of the table which fits into the socket. The plug is kept in position by a spring, the resiliency of which is easily overcome by the weight of the table. By this means the table stands level when it is desired to use it in any other place than that in which it generally stands. A model of this attachment was accepted by the King. Their Majesties then examined the old roll of the Royal Medical and Chirurgical Society, the parent of the new organization, and showed great interest in the names of the eminent medical men therein inscribed. Particularly the King was heard to remark on the name of Sir William Jenner. Previous to the King and Queen inscribing their names on the new roll of the Royal Society of Medicine they examined and conversed about the staff and serpent of the Epidaurian god which is represented at one end of the library by a specimen of *Coluber longissimus aesculapi*, coiled round the traditional staff. Subsequently, copies of the *History of the Royal Society of Medicine* were presented to Their Majesties. Some time was spent in examining books, and on leaving the library Their Majesties were conducted to the second floor of the building, and after passing through and inspecting the various committee rooms proceeded to the Fellows' tea-room, where tea was served, when the following ladies and gentlemen had the honour of being present: Sir Henry Morris, Sir Thomas Barlow (President of the Royal College of Physicians) and Lady Barlow, Mr. Rickman J. Godlee (President of the Royal College of Surgeons), the Lord Mayor and the Lady Mayoress, Lord and Lady Strathcona, Mr. Pierpont Morgan, the Mayor and Mayoress of Marylebone, Sir William and Lady Church, Sir Francis and Lady Champneys, Sir William and Lady Osler, Sir Douglas Powell, Sir James and Lady Reid, Sir Havelock and Lady Charles, Sir Francis Laking, Dr. and Mrs. Norman Moore, Dr. and Mrs. Arthur Latham, Mr. H. S. Pendlebury, Mrs. Leadham, Mr. J. Y. W. MacAlister.

After tea Their Majesties took leave of the Council, the President and Secretaries accompanying them to their carriage; but previous to Their Majesties' departure the King inspected the guard of honour, which was composed of medical cadets from the University of London Officers' Training Corps contingent. The newly-formed band of this corps gave during the proceedings a programme of music.

It may be noted that the Society has enjoyed royal patronage since its incorporation in 1834. Its forerunner was founded under the name of the Medical and Chirurgical Society of London in 1805, and in 1834 King William IV granted the Society a royal charter and became its patron. On the death of His Majesty, Queen Victoria became patron and signed the roll, and His late Majesty King Edward VII, as Prince of Wales, presided over committees of the Society at its house in Hanover Square, and upon his accession became Patron and signed the roll. In 1905 the Prince of Wales, our present King, was elected a Fellow of the Society and attended the centenary dinner, and on his accession became Patron.

The offices of the Society and also the new library for Fellows will be reopened at the Society's new house on Wednesday next, May 29th.

We are asked to state that the new library and halls will be open to the inspection of any member of the medical profession on presentation of his visiting card on and after June 1st until the end of July.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of the Society for Relief of Widows and Orphans of Medical Men was held at the Mansion House on May 15th by the kind invitation of the Lord Mayor. The Right Hon. Sir THOMAS BOOR CROSBY was in the chair. Thirty members were present.

The officers for 1912–13 were elected, the Lord Mayor being elected President and Dr. Clement Godson and Dr. W. Culver James Vice-Presidents. Eight gentlemen were elected directors to fill the vacancies in the court.

A cordial vote of thanks was passed to the editors of the various medical journals who from time to time published notices of the society.

It was reported that since the last annual meeting 10 new members had been elected; 3 had died and 2 resigned. The society had 1 honorary member, 150 life, and 153 ordinary members, making a total of 304, which, considering the number of medical men eligible for membership, is but a very small proportion. The directors referred with great regret to the death of Dr. Blandford, who was elected a member in 1869 and president in 1906; he had always taken the greatest interest in the society, and was a constant attendant at its meetings. Reference was also made to the death of Sir Samuel Wilks, Bart., M.D., one the vice-presidents. The invested funds amounted to £101,600, from which was derived in interest the sum of £3,167 8s. 2d. In addition £440 4s. was received in subscriptions and donations. Amongst the annuitants of the charity, namely, 47 widows and 13 orphans, the sum of £3,059 10s. was distributed, each widow receiving on an average £50, besides an additional £10 as a Christmas gift, and each orphan £15 and a gift of £3 at Christmas. The grants to orphans had been increased from £15 to £25 per annum. The working expenses for the year amounted to £215 16s. 7d. The Copeland Fund enabled the society to grant to any widow or orphan already in receipt of the society's ordinary relief, extraordinary assistance in special circumstances of unusual distress, such as blindness, paralysis, insanity, severe disabling accident, or grave permanent disease, and to continue such extra relief in the case of orphans beyond the age of 16 or 18 years (at which under the society's existing by-laws the ordinary relief ceases) for such further period as the Court of Directors might think fit. One widow was elected on to the funds during the year, and on December 31st there were 47 widows and 10 orphans in receipt of grants. One of the widows has been on the books since 1854, and had already received over £2,360. Relief was only granted to the widows and orphans of deceased members, who had paid their annual subscription for three years, or who were life members. During the year thirty letters were received from widows of medical men who, in many instances, had been left practically penniless, asking for relief, but this had to be refused, as their husbands had not been members of the society.

The directors desire to bring to the notice of the members of the medical profession, especially the younger, the advantages of joining the society. Membership is open to any registered practitioner who at the time of his election is resident within a twenty-mile radius from Charing Cross. Should any member remove beyond the limits of the society he nevertheless continues to be a member. The annual subscription is two guineas; every member who has paid this sum for twenty-five years becomes a member for life. Life membership may also be obtained by the payment of one sum, varying with the age of the applicant. Further particulars and application forms may be obtained from the Secretary at the offices of the society, 11, Chandos Street, Cavendish Square, W.

THE Chelsea Hospital for Women has received from the Trustees of Smith's (Kensington Estate) Charity £250 for its rebuilding fund.

LITERARY NOTES.

THE announcement that the National Hospital for Diseases of the Heart is to be removed from its present local habitation at 32, Soho Square, recalls the fact that the house was formerly the residence of that munificent patron of science, Sir Joseph Banks. Banks, whose interest in botany had been accidentally aroused when he was at Eton, accompanied Captain Cook in the *Endeavour*, which left Plymouth on August 25th, 1768. He took with him Solander, a favourite pupil of Linnaeus, two draughtsmen, and two other attendants. The journal which he kept was freely used by Hawkesworth in his account of the voyages of Carteret, Wallis, and Cook. After visiting Le Mair's Strait, Tahiti, New Zealand, Australia, New Guinea, Batavia, and enduring many hardships and dangers, the party once more reached England, arriving at Deal on June 12th, 1771. Banks brought back with him a large collection of plants, and the kangaroo and other animals previously unknown to science were discovered. In 1772 he visited Iceland with Solander, and climbed to the top of Hecla. In 1778 he was elected President of the Royal Society, of which he had been a Fellow since 1766. As a naturalist he had to encounter strong opposition on the part of the mathematicians who then formed the largest part of the society, and this made the task he set himself of reforming administrative abuses all the harder. He triumphed, however, and his ascendancy was never afterwards disputed. His house in Soho Square was for many years a kind of Mecca to which scientific men of all nations made a pilgrimage. Not only was he lavish in his hospitality, but he encouraged many struggling men, and his liberality was by no means limited to his own country—a fact particularly creditable to him considering that he lived through a time of wars and rumours of wars. After his death, which occurred in 1820, his collections and books were given to the nation. His library is kept in a room at the British Museum; his scientific collections are in the Natural History Museum at South Kensington. According to the *Morning Post* the old Adams fireplaces of his house are still to be seen in the wards of the hospital, with graceful cameo plaques beneath the mantel-shelves; the mouldings on the walls have been left in position, the rooms for the most part are structurally unaltered, and, as in Banks's day, the hall is still lighted by a grandly-conceived circular window in the roof. The south ward is a magnificent room of lofty proportions, and it was there and in the old dining-room downstairs that Banks used to entertain his guests. The records describe how Banks's house was "open every Sunday evening during the winter season."

In the BRITISH MEDICAL JOURNAL of May 4th the Hippocratic oath was compared with the Vedic formula of initiation as given on a tablet placed by Sir Richard Havelock Charles in the entrance-hall of the Calcutta General Hospital. Want of space prevented anything like a complete comparison. There is one point, however, sufficiently remarkable to deserve more detailed treatment. In the Hippocratic oath nothing is said about gratuitous treatment of the poor; in the form of the Indian oath inscribed on the tablet referred to the candidate goes further and undertakes not to administer medicines to "those that are exceedingly poor"—a remarkable anticipation of one of the provisions of the Insurance Act. On the other hand, he swears not even for his life's sake to extort his patients' substance. These two undertakings appear to be contradictory; possibly they have some esoteric meaning. There are two forms of the Indian oath, one bearing the name of Susruta, the other that of Charaka. The latter is generally assigned to the early centuries of the Christian era; the former is supposed to be of considerably greater antiquity. But scholars differ widely as to the dates of these Indian physicians. The point on which we wish to lay stress is that the older of the Indian physicians imposed much larger obligations in regard to gratuitous treatment than the other. In the form of the oath given by Susruta the doctor takes upon himself as a solemn duty the gratuitous treatment with his own remedies of all Brahmins, spiritual directors, *poor persons*, neighbours, men devoted to piety, orphans and patients coming to him from a distance. This passage is not found in the oath as given by Charaka, which approximates to the Greek text. On the other hand, Charaka is fuller in the matter of the behaviour of a doctor in a patient's house. He says:

> When accompanied by a man well known and authorized to introduce him, the doctor enters the dwelling of the patient, he must . . . observe all possible rules of good conduct. His word, his thought, his attention, should be directed to nothing but the treatment of the patient and that which relates to his condition. He will not allow himself, even in thought, to outrage the wife of another man or to interfere with his belongings.

Charaka adds that he should have nothing to do with the women except in the presence of the husband or his superintendent, nor accept any present from them without the consent of one or the other. Charaka is also stricter than the Hippocratic oath in the matter of professional secrecy. Not only must the things which the doctor sees in the house not be divulged, but nothing must be said as to the probable termination of the illness if this is likely to be hurtful to him or to any other person. Again, as regards devotion to the patient's interest, Charaka says the doctor must devote himself entirely to the good of the person under his care, and even were his own life in danger, he must not consent to do harm to a patient.

Charaka gives sound advice on other matters to those intending to take up medicine as a profession. For instance, he says:

> An intelligent man who wishes to become a doctor must first consider whether his resources, the results he may expect, his motives, the time, and the place of residence are favourable.

Beside this may be placed a fragment from the Hippocratic treatise which goes by the name of *The Law*:

> He who wishes to attain an intimate knowledge of medicine must combine in himself the natural dispositions, an acquired knowledge, a favourable place of residence, an education begun in infancy, the love of work, and a long application.

How many failures would be avoided if these counsels were carefully pondered by those who wish to become practitioners of the healing art!

In his *Recollections of a Parisian*, which was translated not long ago by Lady Theodora Davidson and published by Mr. John Murray, Dr. Poumiès de la Siboutie relates a curious story about Bernadotte, one of Napoleon's marshals, who became King of Sweden. The lancet was then in common use, but the King would never submit to be bled, although he had a private physician who was a great believer in venesection. On one occasion, however, he was forced to submit, as the doctor declined otherwise to be responsible for his life. "Well, do as you wish," said the King at last, "but you must never tell anybody what you see on my arm!" And, turning up his shirt sleeve, he exhibited a tattoo mark, consisting of a Phrygian cap, with the motto "Death to Kings!" When the soldier had caused this regicide device to be engraven on his flesh, he assuredly never anticipated that he would himself become a King. Of Dupuytren, who is unkindly spoken of by most of his contemporaries, Poumiès de la Siboutie says:

> When I joined the staff of the Hôtel-Dieu I was assigned to Dupuytren as assistant for fracture cases. He was a stern taskmaster, but worked quite as hard himself as he expected others to work for him. Winter and summer he was at the hospital by half-past five. He began his rounds at once, passing quickly over slight cases and concentrating his attention on the graver ones. He insisted on careful dressings and rigorous cleanliness. "Clean linen has an important bearing on the success of a case," he would observe. He always had a word of kindly encouragement for the sufferers. He would even laugh and jest with them, if he thought it would do them good, though it was not natural to him to do so. After the round, the out-patients were brought in; then he performed operations, and finally lectured, so that he was seldom ready to leave the hospital before ten o'clock. He never failed to accept and pocket the roll of bread which, according to a very ancient custom, is offered to the doctor at the end of his round. In the evening he would pay a second visit to grave operation cases. It is therefore hardly necessary for me to repeat that, if Dupuytren left a large fortune, it was certainly not at the expense of indigent patients, for he treated them gratuitously.

There are many other passages of medical interest in the book. The author lived through an eventful time, and saw many changes of government. He knew everybody, and a particular charm of his reminiscences is that he spoke no evil of any one—not even of his professional brethren.

British Medical Journal.

SATURDAY, MAY 25TH, 1912.

LEGISLATION FOR THE FEEBLE-MINDED.

THE problem of the feeble-minded has been so long under discussion, both by the profession and the public, that we can but hail with satisfaction the practical interest aroused in Parliament by the presentation this session of no fewer than three measures dealing with the subject.

The bill introduced by Mr. Stewart and promoted jointly by the National Association and the Eugenics Education Society was fortunate in securing a second reading last week, and the debate upon it showed an appreciation by members on both sides of the social dangers of leaving matters as they are and a readiness to put limits on the liberty of defective individuals in their own interests and those of the community. The Feeble-minded Persons (Control) Bill is a modest measure of twenty-one clauses, devised on uncontroversial lines, with the view of obtaining with as little delay as possible powers of control over feeble-minded persons who are admittedly a source of danger to themselves and to the community, leaving for future adjustment financial arrangements which are essentially in the province of the Government. Stimulated, perhaps, by the good fortune of this private member's bill, the Government laid upon the table of the House a more comprehensive measure. Of its details some account is given in another column. We venture here to offer a few criticisms arising on its perusal, though, of course, further information will be forthcoming when the Home Secretary formally explains its provisions. It differs from Mr. Stewart's bill by constituting an entirely new Central Authority for the mentally defective, instead of placing them under the wing of the Commissioners in Lunacy. There is indeed a proviso for possible amalgamation at a future date; but, considering the experience in mental defect of various forms already possessed by the Lunacy Commissioners, it may be questioned whether their services might not advantageously have been utilized, addition being, of course, made to their number. The British Medical Association, in its evidence before the Royal Commission, took the view that the new classes of defectives which it was intended to place under supervision should be brought under the existing Lunacy Commission modified and enlarged to correspond with the extended range of its duties. The guiding principles were that, from the medical standpoint, whatever differences there may be in degree, the matters to be dealt with are in nature homogeneous, and accordingly that the public provision for the care of persons suffering from unsoundness of mind, whatever its degrees or varieties, should be controlled by one central authority. This may be regarded as the key of its position in the matter. Overlapping will be inevitable if there are two authorities dealing with the mentally unsound.

The Medico-Psychological Association also is, we understand, strongly of opinion that the authority which will have to administer the Mental Deficiency Act should be constituted at once in anticipation of any amalgamation, such as is contemplated in Clause 62, and that any such body in the first instance should consist of the present Commissioners in Lunacy with necessary additions; this principle is in strict conformity with the recommendations of the Royal Commission on the Care and Control of the Feeble-minded, and the system actually adopted in the bill in the case of Scotland (Clause 67, Subclause 1).

The persons to be dealt with by the bill are for the most part those who show some form of congenital mental defect; while habitual drunkards and persons found wandering about, neglected, or cruelly treated are included, provided they come within the category of defectives. In this respect the bill, taken in conjunction with the Inebriates Bill, probably goes as far as circumstances allow in the direction of the Association's view that the control of vagrants and persons suffering from habitual inebriety and drug habits should be supervised by the Commissioners. Unconfirmed mental disease is not dealt with in the bill, and could not very well be so dealt with if the authority is to be separate from the Lunacy Commission. In one respect at least the provisions of the bill seem to go beyond its general scope: this is in the inclusion of the mentally infirm, who are defined as "persons who through mental infirmity arising from age or decay of their faculties are incapable of managing themselves or their affairs." It is a little difficult to see how this class fits in with the general idea of the bill.

The bill would throw upon local authorities the duty of providing institutions for persons to be dealt with under the Act, subject, however, to the condition that the money paid by the Treasury to the local authority shall be sufficient to provide 7s. a head for each person for whom it is responsible. The local authority, either alone or in combination with other authorities, might establish an institution for defectives or might contribute towards the expenses of existing institutions; such institutions would have to receive the approval of the Home Secretary, and would be visited by the visitors of licensed houses under the Lunacy Act. A private person might maintain for profit a house for the reception of defectives to which a defective might be sent under the provisions of the bill, but such person must obtain a certificate of fitness from the Commissioners. The bill, however, would appear to allow a person to undertake for reward the care and control of not more than two persons who are defective without obtaining a certificate.

Arrangements for the education of defective children up to the age of 16 are still left in the hands of the education authorities, and there is no provision for the compulsory application of the Elementary Education (Defective and Epileptic Children) Act throughout the country, though doubtless its adoption will be encouraged by the knowledge that there is provision for continuity of oversight after leaving school. So far not more than one-fourth of the requisite special school accommodation for defective children has been provided.

The definition of the extent of the scope of the bill, in Clause 17, is ambiguous by reason of the conditions appended as rendering defectives "subject to be dealt with under this Act"; it might be inferred that the provisions of Part IV were only applicable to certain classes of defectives, and not universally, as is probably intended.

There is one clause in the Government bill which is

a new departure in British legislation and will undoubtedly attract a good deal of attention. The fiftieth clause would make it a misdemeanour for any person to intermarry with or attempt to intermarry with a person he knows to be a defective within the meaning of the Act. Further, any person who solemnizes or procures or connives at a marriage knowing that one of the parties thereto is a defective would likewise be guilty of a misdemeanour. This is a first step along a road which many think the community must set itself to travel.

The Government bill is silent as to qualifications to be possessed by members of the new Commission, but, considering the essential need for medical knowledge in dealing with mental defectives, it is to be hoped that this point will not be overlooked in the discussions which must take place in the House of Commons should the Government proceed with its bill. Upon the judicious selection of skilled and experienced commissioners, and of the inspectors who are to assist them, much of the success of any Act for dealing with defectives must depend.

With certain amendments and the possible incorporation of some of the more elastic principles of Mr. Stewart's bill, the Government bill might be made a sound and effective measure. Legislation is long overdue, and it is to be hoped that opportunity may be found for passing it into law this session.

MEDICAL BENEFIT AND THE ADVISORY COMMITTEE.

AT the first meeting of the Joint Advisory Committee on May 10th the Chancellor of the Exchequer in his opening speech stated that the Commissioners had appointed a subcommittee to collect evidence as to the conditions of remuneration prevailing in general medical practice throughout the United Kingdom. He added that the object of this inquiry was simply to collect facts, and would be without prejudice to any arguments the medical profession or others might desire to base upon the facts, when the time came for considering what the nature of the financial provision ought to be.

The Commissioners subsequently issued a notice[1] stating that they would be glad to receive information from representatives of medical or other associations, or persons prepared to submit statements of fact or to tender evidence on this question. As will be seen by a report published elsewhere, the State Sickness Insurance Committee at its meeting last week directed a letter to be addressed to the Joint Committee of Commissioners drawing attention to the fallacy which would arise if the information asked for by the subcommittee were regarded as a guide to the remuneration which would be acceptable to the profession in connexion with the Act. The letter further pointed out that the present rates of remuneration for such classes are largely determined by the financial position of the patient, and that the medical profession had been actuated on the one hand by a feeling of compassion for the patient, and on the other by the fear of having to undertake entirely unpaid work. The altered financial condition of the patient due to the introduction of compulsory assisted insurance removes or lessens both these factors. The reply, which is also published elsewhere, stated that the inquiry of the subcommittee would not be confined to the amount of remuneration received in the past by the profession for medical services rendered to a class of patient likely to be insured under the Act and entitled to receive medical benefit of the normal type, but would include the collection of evidence of any kind that would assist in the decision as to what would be proper remuneration for the services to be rendered under the Act. It was added that before commencing the inquiry the Commissioners desired a conference with representatives of the British Medical Association, when such points as were raised in the letter could be fully discussed and considered. This is satisfactory in itself, and also as an indication that the Commissioners recognize that negotiations on this point must be conducted with the British Medical Association and not with the members of the Advisory Committee. At the same time it cannot escape attention that the Insurance Commissioners are conducting the business of the Joint Advisory Committee in a dilatory manner. It has held two meetings, and busy men have been brought to London at great cost to them in time and money from all parts of the country, and little or no business has been done.

At its first meeting the Committee, after a speech by the Chancellor of the Exchequer and some general conversation, was supposed to have arranged more or less definitely how it was to tackle the immense amount of work it ought to get through. It was understood that it was to meet in two sections—the one to consider questions of rates, collection, and bookkeeping, the other medical benefit and other matters in which the medical profession is specially concerned, and on which expert medical opinion is therefore necessary. At the second meeting last week (May 17th) the medical members were shepherded into one side of the large theatre in Burlington Gardens, familiar to graduates of the University of London as the meeting place of Convocation in the stormy days before the last reorganization. On the other side were the representatives of the friendly societies, the trade unions, and insured persons generally, and between them representatives of the employers, the midwives, and other miscellaneous interests.

This, then, was another session of the whole Committee, and the first subject it was asked to discuss was how it would do its business, a matter supposed to have been to some extent, at least, settled at the first meeting. This large meeting was then asked to express its opinion on the methods of medical remuneration, and on how lists or panels of medical men should be formed. It was, according to promise, presented with a synopsis of matters to be considered in connexion with the framing of regulations as to medical benefit and other medical questions under the Act. But everybody present knew very well the nature of the matters which would have to be considered, and as specific draft regulations dealing with the several points set out in the synopsis were not presented, the discussion was inevitably of a very general and even academic character. The arguments for and against the methods of payment by capitation and by attendance were set out both in print and speech, and the possibility of a mixed system under which medical services would be remunerated by a fixed sum a head per annum and partly by fees for attendance was mentioned, as was also the system of whole-time medical appointments.

When the Committee separated on May 17th, after some five hours' desultory discussion, it was understood that on May 31st—after the Whitsuntide

[1] SUPPLEMENT, May 18th, p. 538.

recess—the Commissioners would meet the medical members of the Advisory Committee for the serious discussion of draft regulations as to the broad principles of the administration of medical benefit. This at least is the hope. But even if it be fulfilled there must then be a good deal of delay, for it is understood to be the intention of the Insurance Commissioners to submit the result of their discussions with the medical members to other sections of the Advisory Committee —and there may be three or four such sections—and thereafter to call a meeting of the whole Committee to discuss the recommendations of the several sections, which are not likely to be altogether concordant. This takes us well into the middle of June, and the Act is to come into operation on July 15th, from which date contributions will be paid, and the State's bargain with the insured clinched. Yet many important subjects have not been touched upon. For instance, according to our information, the regulations to be made under section 15 (3), commonly called the Addison subsection, have as yet not even been mentioned in the discussions or conversations which have taken place. This is the subsection which provides that the Insurance Commissioners shall make regulations authorizing an Insurance Committee to require any person whose income exceeds a limit to be fixed by the committee and to allow other persons to make their own arrangements for medical attendance and treatment. In connexion with this subsection, it will be necessary to discuss the meaning of the term "income," what it is to include, how it is to be determined, and finally, how the definition is to be made operative. Another matter to which consideration seems not yet to have been given is that of the regulations to be made under section 15 (4), commonly called the Harmsworth subsection, which enacts that the regulations shall provide that in the case of persons entitled to receive medical attendance and treatment under any system or through any institution existing at the time the Act was passed, and approved by the Insurance Committee and Insurance Commissioners, such medical attendance and treatment may be treated as, or as part of, their medical benefit, the Committee being authorized to contribute towards the expenses of such attendance and treatment the whole or any part of the sum which would be contributed in the case of persons who had made their own arrangements. The regulations to be made under this section must define the meaning of the terms "system" and "institution," and there seems ground for believing that it will be suggested that the subsection would not only apply to medical institutes, but that friendly societies, club practices, provident dispensaries, the colliery poundage system, club practices attached to large industrial works, and private doctors' clubs shall also be included.

SCHOOL TREATMENT CENTRES.

A DEPUTATION from the British Medical Association met the President of the Board of Education on Thursday, May 16th, to lay before him the views of the Association on the question of the medical inspection and treatment of school children in London. It is now nearly five years since Parliament passed the Education (Administrative Provisions) Act, which came into operation on January 1st, 1908. In it two things were enacted, the medical inspection of school children, which was compulsory, and the treatment of school children, which was optional. The Act laid upon the local education authority the duty of carrying out the inspection of children, and gave it the power to carry out the treatment, but did not lay upon it an obligation to do so. The Education Committee of the London County Council recommended the Council to treat its school children, and a hybrid committee was appointed to report on the whole question. After considering the matter for fully a year, this committee reported in favour of the adoption of school clinics for the treatment of the children. The Council, however, refused to adopt this report, and called to its help hospitals and existing institutions; arrangements were accordingly made with several hospitals in London to carry out the treatment of the children, and this hospital system is now in its third year, although the Board of Education has only granted it temporary recognition. Besides the natural disinclination of many of the parents to have their children treated at the hospitals, there are difficulties connected with these institutions which make it impossible for them to fulfil the purpose that would be easily accomplished by what is now called a school medical treatment centre. The difficulties in the way of utilizing the hospitals from this point of view are that they are often—indeed, usually—situated at great distances from where the children live; that since a child is not allowed to go alone, the time of another member of the family is occupied in going and coming; that there is also often a long wait at the hospital; and that the parents are put to expense in tube or 'bus fares. Moreover, the hospital authorities have with one accord refused to allow any inspection of their work by the London County Council, with the result that the ratepayers pay money without any control over the work on which it is spent.

As was pointed out to the Board of Education on this and former occasions, the views of the British Medical Association are in favour of treatment centres controlled and worked by the medical men of the neighbourhood. At least two of these (Norwood and Wandsworth) are doing good work for the children of London, and others are under the consideration of the Board of Education. The President expressed himself in favour of these centres, and it is sincerely to be hoped that he will see his way at no distant date to recognize the several treatment centres now under consideration, and give the necessary authority to the London County Council to initiate those centres in the north and north-west of London the schemes for which the Council has already passed. The medical men who would conduct these centres would be men of experience, well qualified for the post, and their final appointment would be in the hands of the London County Council. These school centres would be open at all times to the inspection of representatives of the Council, and the medical men, having their practices in the neighbourhood, would be in touch with the homes of the children; they would be in close connexion with the medical officer of health of the borough, and he again would be in touch with the chief medical officer of the London County Council, who has now been appointed school medical officer for London. Thus a connexion would be formed between the child's home and the school that would be of great value not only for the treatment of the sick child, but also for the early detection of infectious diseases and their more ready stamping out. Here also there would be a great opportunity for supplying the missing link between inspection and the treatment of children, which has been so sadly absent in the Council's work in the past, that the Board of Education, commenting upon the lack of "following up" from inspection

to treatment, said, "experience has amply shown that unless schemes of inspection and treatment are actually worked together and under unified control, the result can only be leakage, waste, confusion, and administrative chaos." This necessity for linking up inspection and treatment was again emphasized by the President of the Board of Education last week, when he said that, "if any real good was to be secured to the community, to the children themselves, and to the State as a result of inspection, it must be supplemented by adequate treatment." A new and pleasant feature in the reply of the President to the deputation was the statement that he had been able to secure a grant of £60,000 to help the local authorities to go forward in the good work of inspection and treatment of school children. To the general practitioners he said that he sympathized with them "when they felt that their own patients were being taken away to a hospital to be treated instead of being treated in the ordinary way."

The members of the deputation put the case for treatment centres, and the employment of general practitioners at these centres in conjunction with the public health service, in a clear and lucid manner, and although the President of the Board of Education did not commit himself to the scheme in full, he said enough to lead the medical men in London interested in this work to hope that another three or four new centres capable of treating school children will be established in London.

STARVING ISLANDERS.

THERE is no more isolated spot in Great Britain than St. Kilda, which, though classed with the Hebrides, is far distant from the outer group. It is the chief islet of a rocky group of sixteen or seventeen in the Atlantic and lies forty miles westward from Lewis. It is about three miles in length from east to west, and two miles broad from north to south, the total circumference being nine and a half miles. It is surrounded by perpendicular rocks of great height, except at one small spot on the south-east, where there is a bay which forms the only landing place. Elsewhere the island is inaccessible, and the bay itself makes a difficult approach, except when the sea is calm. The island is virtually cut off from communication with the outer world during the whole winter. The inhabitants are gathered together in a village about a quarter of a mile from the landing place. St. Kilda belongs to Macleod of Macleod; readers of Boswell's *Journal of a Tour to the Hebrides* may remember that Dr. Johnson laughingly suggested that he should buy it, and offered to be his Lord Chancellor. There is a terrible romance connected with the island. In 1730 Lady Grange, the wife of the Lord President of the Sessions, who had been concerned in a Jacobite plot with Lovat, Mar, and others, was sent by her husband, whom she had threatened to expose, to St. Kilda, where she remained for seven years. An attempt to rescue her failed, and she was removed to Skye, where, in 1745, she died, worn out with sorrow. The natives number about a hundred, and feed largely on the flesh of the solan goose and the oil obtained from it. The island is interesting from a medical point of view. For many years the population remained stationary, owing to the great mortality among the new-born children caused by trismus neonatorum. It was estimated that this scourge, which used to be called the "eight day disease," carried off five out of every nine babies; the cause seems to have been, in addition to general insanitary conditions, infection of the umbilical cord, owing to the children being left wrapped in a dirty blanket till the ninth or tenth day after birth. We believe that the enforcement of proper precautions, such as were pointed out by Dr. G. A. Turner, of Glasgow, in a paper published in the BRITISH MEDICAL JOURNAL of October 24th, 1896, has caused the disappearance of this disease. Another ailment peculiar to the island was "boat cough"; from the descriptions given by various medical men it seems to have been a form of influenza. The natives believed that it was imported by strangers landing on the island. Tuberculosis is unknown. As the islanders practically form a segregated community they suffer from no other endemic diseases; hence in a pathological sense the population is virgin soil, in which, as is well known, infections are apt to rage with peculiar virulence. This winter the island has been more than usually inaccessible, and the inhabitants were reduced to the verge of starvation. On being informed of this, the Admiralty at once ordered H.M.S. *Achilles* to go to their assistance. Our enterprising contemporary, the *Daily Mirror*, at the same time dispatched a specially chartered vessel, the *Victor*, carrying large stores of provisions, supplied mainly by Sir Thomas Lipton. Application was made to the London Hospital for a doctor to accompany the expedition, and Mr. C. J. Taylor, M.B.Oxon., one of the house-surgeons, volunteered for the service. The party left London on the evening of Saturday, May 18th, and the inhabitants of St. Kilda are by this time out of all danger of starvation. The incident may be regarded as another proof of the inestimable boon of modern means of quick communication, for nothing was known of the sad plight of the islanders till news of it was brought to Aberdeen by a trawler which arrived there on Saturday, and announced that the inhabitants of St. Kilda, having exhausted the provisions usually sent to them periodically, had been living for some time on bird's eggs, and had come to their last handful of flour. In days before the telegraph was in use it is probable that the whole population would have perished before news of the state of things could have reached the outer world.

THE INOCULATION DEPARTMENT AT ST. MARY'S HOSPITAL.

IT rarely happens that such prompt recognition of entirely new ideas should be enjoyed by their promulgator, as has fallen to the lot of Sir Almroth Wright. History tells of many a scientific discovery, laboriously developed under difficulties and adverse criticism, overcome only by long years of patient persistence, but in something less than ten years the theories put forward by him to explain the phenomena of susceptibility to, and immunity from, diseases of microbic origin, have not only been recognized by the medical schools of the world, but have been introduced into practice with sufficiently successful results to warrant their more general application. Many distinguished pathologists have laboured to the same end, but it is to Sir Almroth Wright, backed up by public-spirited financial supporters, that the profession in this country is indebted for a remarkable advance in knowledge as to the behaviour of the blood toward infective microbes and as to the means whereby their influence may be neutralized. St. Mary's Hospital has become the centre from which this new knowledge radiates. The importance of the new theories, which had been worked out under difficulties for several years, was formally recognized in 1909 by the appointment of a strong committee of financiers and others, presided over by Mr. Balfour, to organize and control a department of therapeutic immunization. A certain number of beds were allotted to the department in the new wing of the hospital and the generosity of several wealthy men found the means to maintain them. Under these favourable conditions the work has progressed for the last three years, but up to a recent date no official report had been issued. Such a report has, however, been lately published, and dealing as it does with entirely new work, is couched in simple terms explanatory of the whole subject, for the

benefit of the lay rather than of the medical reader. Simplicity of statement is a characteristic of the whole report, and for medical readers who have not had leisure to follow the progress of the study of the problems of immunity we can strongly recommend a careful perusal of it. The ultimate aim of inoculation treatment is preventive rather than curative, although the immediate effect is to diminish the results of present disease. Prevention is to be secured by rendering the body immune to the attacks of the microbe to which the individual may be specially subject. The discovery of the means by which such susceptibility may be found out has been the main achievement of Sir A. Wright, and his methods of treatment are essentially guided by it. The report shows that it is in certain cases not only possible to ascertain within a comparatively short time the precise microbe from which the patient may be suffering, but also to prepare and inject a vaccine of the appropriate strength to bring about annihilation of the effects of the offending organism. In many infective diseases, however, the nature of the infectivity is not known, and only the future can tell to what extent these methods may be of wider application. Of all chronic diseases tuberculosis is the best adapted for the study of the new theories, and although other observers have failed in many instances to obtain any enlightenment from the opsonic index as used by Wright, still in the main his methods have been corroborated. The report, as already indicated, contains no statistical information, and it is only from general statements that any judgement can be formed, but the strong impression left upon the minds of the numerous medical men from all parts of the world who have studied the system and have seen the results of it, together with the faith which has obviously been inspired in many unpromising cases, tells as eloquently as any numerical statement of the estimation in which it is held. Infallibility is not attainable in medical work, and the opsonic index is no doubt as difficult to interpret in some cases as are other more familiar physical signs, but the success that has been achieved under its guidance has not been equalled by any other methods. The question of out-patient treatment by inoculation is hardly considered except to point out its dangers. The risk of autoinoculation as a result of the physical exertion of coming to hospital is great, and must of necessity modify the effects of inoculation from without. Hence the latter is not advised under such circumstances. The experience of other workers who have made use of large doses with success is not touched upon, nor is any precise indication given of the range of doses employed at St. Mary's. For statistical information as to actual results the medical reader must be content to wait and accept the general statements referred to. As regards infective diseases other than tubercle (septicaemia, colitis, chronic arthritis, pneumonia, asthma, whooping-cough, etc.) it may be said that they are all under careful examination, but only partially favourable results can as yet be chronicled. The report as a whole is full of interest, and proves, if proof were needed, that a real advance in scientific therapy has been made. It is to be hoped that it may be followed before long by a further account, intended for medical readers only, in which the failures and their probable causation may be recorded and discussed, and the relative measure of ultimate success may be established beyond question.

THE EFFECT OF SALVARSAN ON THE OPTIC AND ACOUSTIC NERVES.

THE number of persons who have been treated with salvarsan is already so large that it might have been supposed that the difference of opinion which exists on the question whether salvarsan produces neurotoxic changes would have been settled. No suggestion to this effect seems to have been made during the treatment of the first twenty or thirty thousand cases, but reports published chiefly in Germany and France appear to prove that a disquieting number of cases have been seen by some observers. In the BRITISH MEDICAL JOURNAL of January 27th, 1912, p. 205, a full account was given of the indictment brought against salvarsan by Finger of Berlin at the meeting of the German Congress of Neurologists. He said that in the thousands of cases of syphilis treated with mercury or not treated at all which he had had under observation for two or three years after infection nervous complications had been very rare, but that in his first 500 cases treated by salvarsan 44 examples of nervous complications had occurred. Ehrlich's theory is that when salvarsan fails to kill all spirochaetes, those that survive are probably established in bone and dense connective tissue. To this Finger retorted that in 12 out of his 44 cases of nervous complication affections of the skin and mucous membrane were present at the time of the appearance of the nervous symptoms or followed later. Wechselmann, who recorded some 2,800 cases of syphilis treated with salvarsan with only ten instances of nervous complication, has recently[1] reviewed the statements made by Finger and also by Buschke, and has analysed carefully the publications of Ravaut. Basing his opinion on the results of the examination of the cerebro-spinal fluid in cases of syphilis treated with salvarsan, Wechselmann arrives at the conclusion that there is no scientific reason to suppose that salvarsan exerts any deleterious effect on nervous tissue. It is unnecessary to follow out his arguments, inasmuch as they are directed largely against those employed by Ravaut. Recently also Drs. A. Knick and A. Zalozieckí[2] have published reports of 10 cases of affection of the auditory nerve in early syphilis in patients treated with salvarsan. The doses given in these cases were small, and in some of them the aural affection disappeared after repetition of the injection of salvarsan. The striking point in their account is that the lumbar fluid when examined yielded marked signs of an inflammatory condition of the meninges. They are of opinion that the disturbance of hearing was caused by the syphilis in each case. Dr. J. Fejer,[3] on the other hand, has reported 3 cases of papillitis and severe choroiditis in early syphilis, and has expressed his conviction that these conditions were caused by the salvarsan used in the treatment. His argument is that he has never seen syphilitic changes of the papilla of the same character and intensity before. He quotes Finger's statement that optic neuritis occurs twenty times more frequently after salvarsan has been used than after mercury. Other observers have recorded cases of a similar character. It is possible that under rare conditions a given section of a nerve might be so little resistant that it would respond to almost any foreign substance by some pathological change; but reasoning *a priori* it might be expected that the more destructive and more plentiful poison, namely, the products of the spirochaetes, would be the first to attack these weakened nerve sections. At present the grounds for attributing the changes to the arsenic in salvarsan seem to be insufficient. It is admitted that nervous complications of this nature have been occasionally observed early in cases of syphilis treated by mercury, and the most that is alleged against salvarsan is that they occur more frequently after its use. It has never, so far as we are aware, been alleged that these relatively few cases of nerve implication were caused by the mercury prescribed. On the contrary, the general rule has been to push mercury in such cases, and the results have usually been good. There is evidence that arsenic may produce such changes, but this is not conclusive evidence that the arsenic present in the particular combination in which it exists in salvarsan could produce them. The chief point about which we still

[1] *Berl. klin. Woch.*, April 8th, 1912.
[2] Ibid.
[3] Ibid.

need enlightenment is whether the cures effected by salvarsan are as permanent as they are striking. The question whether it is necessary to give mercury, as well as salvarsan, is not yet decided, though the tendency seems to be to use both drugs alternately, and this, as will be seen by reference to the review of their book in a recent issue, is the plan advised by Drs. Carl Browning and Ivy McKenzie.

EXTIRPATION OF THE PITUITARY BODY.

PHYSIOLOGY is wholly or in great part based on observations made during experiments on animals. There is no part of the body with regard to which this holds good more than the central nervous system, and while many secrets are yet hidden from our ken, the amount of absolute knowledge gained in this manner in the past is very considerable. An addition of no small interest has resulted from the patient and careful investigations carried on during the past three years by Drs. G. Ascoli and T. Legnani in Golgi's Institute in Pavia.[1] They removed the gland in dogs. In each case, two puppies of approximately the same size from the same litter were chosen, the one to serve as the experimental animal and the other as the control. At first the gland was removed through the pharynx, but later the extirpation was found to be easier through the temporo-parietal route; the defect left after the operation, they state, is slight. In the vast majority of cases the puppies died two or three days after the operation. In the few that survived the results were remarkable; absolutely no further growth took place. The puppy remained a puppy. The size of the body, of the head, and of the legs remained the same as it was on the day of the operation, while the control grew rapidly. Next, ossification and dentition were arrested. The bones not only did not grow, but showed signs of defective nutrition. As a rule the nutrition of the whole organism suffered, and the animal, while putting on much fat, so that instead of the subcutaneous adipose tissue weighing approximately one-sixteenth of the body, it weighed about one-third. the other tissues appeared to become wasted. Sexual development was completely arrested, and macroscopical as well as microscopical changes were observable in the spleen, thymus, thyroid, and adrenals. These various changes, which followed the complete removal of the pituitary gland, appear to be so complex and so far-reaching that the authors recognize that they have obviously not yet arrived at a complete solution of the problem.

SCHILLER'S SKULL.

AT the last meeting of the Society of German Anatomists Professor von Froriep appears to have cleared up the mystery which surrounds Schiller's skull. In 1805 the poet's body was placed in a vault which was reserved for the burial of the more outstanding citizens of Weimar. In 1826, when the vault was being cleared out, Bürgermeister Schwabe, who possessed a death mask of the great poet, sought to identify Schiller's skull and bones. A cast of the skull then selected was taken before being finally buried. In 1883 Professor Welcker, while investigating the cast of this skull, found that its outline could not be fitted within the outline of the death mask, and came to the conclusion that the mask—particularly the copy preserved in the library of Weimar—was authentic, and that the skull which had been taken from the vault was not that of Schiller, but of a contemporary. To settle the various questions raised by Welcker's investigation, Professor von Froriep recently examined seventy skulls preserved in the old vault, and succeeded in finding one which exactly corresponds with the death mask of Schiller, thus substantiating Welcker's contention that the skull selected from the vault in 1826 was not Schiller's. Professor von Froriep's investigation will again call attention to the possibility of reconstructing the outline of the head in life from a study of the skull. Recently there has appeared in Germany a treatise by Professor von Eggeling,[1] in which the matter of reconstruction of the living face from the skull is exhaustively dealt with. Some ten years ago Professor Merkel, who was doubtful of the possibility of reconstructing with any degree of accuracy the soft parts of the face from the outline and markings of the facial bones, handed the skull of an Australian native to a sculptor. The sculptor found that it was impossible to fit a face of the European pattern to the skull, and worked one out which agreed with the contour of the bones. The face thus reconstructed showed the essential features of a native Australian woman. There is thus no good reason for rejecting the reconstructions which have been made by various anthropologists of long-extinct races and types of mankind from a study of their cranial forms. With further study and inquiry we may obtain such data as will allow us to reconstruct with accuracy the facial contour of individuals who lived in a geological age which precedes the present.

[1] *Muench. med. Woch.*, March 5th, 1912.

PEKING UNION MEDICAL COLLEGE.

THE evolution of a system of medical education in China is in progress, and medical missionaries are taking a prominent part in its initial stages. For many years individual missionaries have undertaken to train students in medical subjects, and in this way have met the need as best they could. It has, however, been apparent for some time that the progress of general education in China demanded a much more elaborate system of medical training than any of the individual hospitals could afford. It was this conviction that led to the formation of the Union Medical College at Peking, the main building of which was opened in March, 1906. The report for 1911–12, which is before us, is a record of great results achieved by a group of medical men representing some of the chief missions working in Peking, British and American, with the London Missionary Society as the pioneer in the movement. During the past year sixteen students have graduated after a full five years' course, and have received not only the M.D. of the college, but also a diploma issued by the official Chinese Board of Education. The task of preparing this class has thrown a great strain upon the Faculty, which consists of sixteen qualified medical men with five additional lecturers, especially as the teaching has been conducted in the Chinese language. The translation of the necessary textbooks has been carried out for some years by the China Medical Missionary Association, and the staff of the college is helping in this work. The students have during the year rendered splendid help, under the direction of members of the staff, in special plague duty, in which two students lost their lives, and in Red Cross work. The revolution has considerably affected the work, as it was difficult to retain the attention of the students, but great hopes are now entertained for the future. The buildings of part of a new hospital in connexion with the college are now nearing completion. Dr. Cochrane, the first principal of the college, is now in England, and would, we learn, be pleased to send a copy of the report to any one interested in the college who will apply to him, care of the London Missionary Society, 16, New Bridge Street, London, E.C. He is at present engaged in furthering the development of this and other union schools under missionary auspices, which are in process of formation in many important centres.

RESEARCH ON TROPICAL DISEASES.

THE late Lord Wandsworth left a sum of £10,000 to Sir William Bennett to be applied by him at his discretion for the promotion of medical research It is announced

[1] *Physiognomie und Schaedel.* Von Dr. med. H. von Eggeling. Jena: Gustav Fischer. 1911. (Roy. 8vo, pp. 45, Abbs. 17. M. 1.50.)

that Sir William Bennett has decided to entrust the administration of the legacy to the London School of Tropical Medicine under conditions which include the establishment of a research scholarship, tenable for two or three years, and to be given by preference to a British subject. The Committee of Management of the Seamen's Hospital has been appointed by Sir William Bennett to be the trustees of the fund, and the scholar will be appointed by that body on the recommendation of the Committee of the London School of Tropical Medicine. We have special pleasure in announcing this gift to the school because we have watched its growth from very small beginnings to its present flourishing condition, and have done what we could to enlist public sympathy on its behalf. In doing this we have been moved by a sense of the vast importance of tropical medicine in relation to the prosperity of the empire, and by the conviction that the deadliest foe to colonization is disease. As Sir Patrick Manson said when the study of tropical medicine was yet in the day of small things, success in developing the resources of our dominions overseas depends on knowledge and the application of knowledge. Since he uttered these words at a meeting of the Royal Geographical Society much has been done to increase knowledge of tropical diseases by the London School of Tropical Medicine, which owes its origin to Mr. Joseph Chamberlain, a far-seeing statesman whose enforced retirement from public life has been a grievous misfortune to his country. Much, too, has been done by its friendly rival of Liverpool, which has the advantage of a civic patriotism that, unhappily, does not thrive so vigorously in London, where the feeling of citizenship is swallowed up in larger matters or broken up into small local interests. Lord Wandsworth's bequest will doubtless do much directly to help the work of the London School, but we hope it will also be useful indirectly in stimulating other wealthy men to follow his example. The promised visit of the King and Queen to the school in July will, it may confidently be hoped, have a powerful influence in the same direction. Nothing could better show the breadth of view which our gracious Sovereign brings to the fulfilment of the duties of the ruler of a vast empire. It is stated that the first Wandsworth scholar will proceed to the West Coast of Africa to study the parasites of human blood.

BRAIN EDUCATION.

AN interesting analogy between the brain and an electrical machine was worked out by Dr. W. Deane Butcher in an address to a recent meeting of the Roentgen Society. He likened the organ of the mind variously to a telephone exchange, an electrical transformer, and a central power station. Something similar to an electric current accompanied every contraction of the heart and movement of the mind, and, were our senses keen enough, the shock of an angry brain would be felt very much as the passage of electricity through the body. The nerve-cell itself with its nucleus and insulating sheaths was similar to an ordinary galvanic cell. A synapsis strikingly resembled the coherer with its varying resistance as used in wireless telegraphy, while blood and lymph might well be called Nature's electrolytic solution in which the nerve-cells were immersed. On the hypothesis of the brain as an electrical organ, Dr. Butcher proceeded to consider its education. Of first importance was the composition and concentration of the electrolyte. The pedagogue of the future would be a professed cook and caterer, as well as an expert chemist and electrician. Education depended largely upon the regulation of the supply of Nature's electrolyte. To what was the faculty of attention due save to an increased blood supply at a chosen brain centre, which involved not only an increase in the nervous output of the flushed centre, but the inhibition, partial at least, of the other perceptive centres? Any great excitement at one part of the cerebral cortex automatically cut off the telephone exchange to other areas, just as a fire in London might prevent communication by wire to Dover. And what was the mechanism of habit but a decrease of electrical resistance along a path of previous excitation from one spot of the brain cortex to another, so that subsequent excitations travelled along the same path by preference? A given series of motor impulses, however complicated, as in piano-playing, had only to be repeated once or twice in order to give the brain a bias in favour of that particular sequence. The best way of educating this commonwealth of nerve cells was by feeding them, keeping their meshes filled with an electrolyte always fresh and pure and frequently renewed, preserving some sort of law and order among them, imposing upon them the laws of habit, and, to such extent as was possible, stimulating or inhibiting one or other of these "cell guilds." Dr. Butcher was of opinion that the education of the future would be dominated by anatomy and physiology rather than by psychology so-called, and he thought that the consideration of the brain and nervous system from the standpoint of an electrical machine might by its very freshness suggest some wise counsels to the educators of the race.

CLERKS AND TUBERCULOSIS.

THE application of the maxim *Volenti non fit injuria*, which is so often quoted in relation to the law of master and servant, was considered in a singular case last week. An action was brought by a man who was until lately employed as a clerk by the Junior Army and Navy Stores. According to the opening statement of counsel, as reported in the *Times*, the plaintiff entered the service of the defendants in 1900; he worked for some five years in the "trading office," but was then transferred to the "deposit office," a room 8 ft. high with a calculated cubic space of 166 cubic feet for each clerk. It had one window, and it was said that about fifty clerks on the average were engaged in this room at one time. In 1911 the plaintiff was compelled to throw up his work owing to pulmonary tuberculosis, and he brought an action against his employers for damages. It was alleged that the office in question was insanitary, dangerous to health, and totally unfit to be used as an office for clerks, and further, that it was a nuisance within the meaning of the Public Health Act. The employers by their defence alleged that they were under no duty to provide and maintain any particular kind of accommodation for the plaintiff or their other clerks. They further alleged that, even if the accommodation was disagreeable or unsuitable, the plaintiff was under no obligation to remain in their service. They relied, in effect, on the maxim quoted. The jury found that the premises were injurious to the plaintiff, but not to the knowledge of the defendants, and that the office was so overcrowded as to be injurious to the health of the plaintiff and other inmates. But they were also asked, "Was the plaintiff, in consequence of the condition of the premises and overcrowding, disabled from following his employment?" to which they replied "No." They also found that he had agreed to run the risk, and in these circumstances judgement was entered for the defendants. It will be seen that the jury was not satisfied that the disease from which the plaintiff was suffering was caused by the conditions of his employment; and even if it had been the judge would probably have been bound to enter judgement for the defendants, on the ground that the plaintiff had voluntarily taken the risk upon himself. The conditions under which clerks are employed might very well form a subject of investigation by sanitary authorities, who have hitherto appeared reluctant to exercise the powers they possess under the Public Health Acts with regard to places in which persons are employed other than factories, workshops, or workplaces. Section 2 of the Public Health (London) Act, 1891, defines a nuisance

for the purposes of that Act as "any house or part of a house so overcrowded as to be injurious or dangerous to the health of the inmates, whether or not members of the same family"; and the same definition in almost identical terms occurs in Section 91 of the Public Health Act, 1875. In the London Act (Section 141) the expression "house" is defined as including "schools, also factories and other buildings, in which persons are employed"; while in the 1875 Act the definition is slightly varied and includes "schools, also factories and other buildings, in which more than twenty persons are employed at the same time." The question as to whether a building in which persons are employed is so overcrowded as to be injurious or dangerous to the health of the inmates has been simplified by Section 3 of the Factory and Workshop Act, 1901, which enacts that a factory or workshop shall be deemed to be so overcrowded as to be dangerous or injurious to the health of the persons employed therein if the number of cubic feet of space in any room therein bears to the number of persons employed in the room a proportion less than 250, or during any period of overtime, 400 cubic feet of space to every person. It seems to be thought that while workpeople have been well looked after by the Factory Acts, the interests of clerks have been neglected by the Legislature. This can hardly be said to be the case, and if any neglect has occurred it has been on the part of sanitary authorities in not enforcing the provisions of the Public Health Acts. It is to be hoped that the action to which we have referred, though unsuccessful as regards the individual plaintiff, may arouse the sanitary authorities to a sense of their responsibilities.

MEDICAL APPOINTMENTS IN THE EAST.

IF we may judge from information which reaches us from time to time, there would appear to be a good deal of discontent among medical men engaged in practice in the East as employees either of official or unofficial bodies. The latter are for the most part rubber, tea, and like companies, the number of which has greatly increased of late years, while among official bodies the principal are the Governments of the Straits Settlements and of the Federated Malay States. Into the nature of the complaints we do not propose to enter in detail, as, apart from their number and variety, the terms in which they are stated are in some cases not sufficiently exact to enable persons at a distance to form a just appreciation of the position, while in others it is obvious that the accounts have been written by men who for one reason or another have forgotten to consider how far the drawbacks mentioned are local and how far incidental to medical life in all parts of the world. These communications, however, leave no doubt on one point—namely, that there are grievances which can and should be remedied, and that a certain number of companies at present take advantage of the readiness of young medical men in this country to take things upon trust. Taking the airy statement of some company secretary at its face value, they leave Great Britain without any real knowledge of the conditions in which they will have to live, of the relative value of the pay offered them, or the work which they will be called upon to perform. It is true that it is not always possible to secure precise information regarding the work to be done on any given estate, but highly useful information as to the general terms of any contract which should be signed, and as to the kind of life which is commonly led by medical men in the same area, can usually be obtained if search for it is made in the right direction. In this respect it would be of great advantage if all medical men in the East made a point of joining the British Medical Association, and if, when aware that a medical vacancy was likely to occur in their neighbourhood, or a new post to be established, they sent a note concerning it either straight home or to the secretary of the local Branch or Division. In this way the common interest would be promoted by lessening the probability of candidates being induced to accept appointments on unfair terms, and thus to help to keep down the standard of medical life in the East. In regard to official employees, the discontent evident in the Straits Settlements and Federated Malay States, or rather the existence of any ground for discontent, is somewhat surprising, since their Governments were among the first to recognize the immense value, both economical and political, likely to accrue from the study and practice of tropical medicine. The Kuala Lumpur research laboratories, for instance, in Selangor, were founded as far back as 1899, and were thus almost the first of such laboratories to be founded in the East. The explanation seems to lie in the fact that their medical services are insufficiently organized to content men who, though prepared to spend their lives in the East, wish to see themselves in a position to marry within a reasonable time, and to feel certain that there is no likelihood of their supersession after many years of good service by men who have not borne the labour and heat of the day. However, both these Governments have in the past done many things towards attracting a good class of candidate, and evidence of their continued enlightenment is forthcoming in the fact that it has already been decided that an inquiry shall be held into the precise causes of the complaints made and the means by which they may be remedied. A satisfactory settlement of matters will be the more welcome and of the greater importance because it is the tone of these services that tends to set that of medical work in the Malay Peninsula and adjoining European protectorates.

SEA-WATER INJECTIONS IN INFANTILE DIARRHOEA.

IT may be remembered that as the result of certain articles which appeared in the BRITISH MEDICAL JOURNAL in September, 1911, there was some correspondence as to the value of sea-water injections in infantile diarrhoea as carried out at the "Quinton Polyclinic." We have no wish to revive the controversy or to refer to the various opinions then expressed, but in justice to M. Quinton, to the profession, and the public, we think it right to state that the question was recently brought before the Paris Academy of Medicine.[1] M. Defrance, Minister Plenipotentiary of France at Cairo, some time ago addressed to M. Poincaré, the Prime Minister and Minister for Foreign Affairs, the following letter: "M. Quinton, who came from Paris to represent the Aviation League of France, of which he is president, took advantage of his stay at Cairo to institute an active propaganda in favour of the sea-water treatment of which he is, if not the inventor, at any rate the resolute champion. In a series of lectures which had a great success and excited considerable attention (two lectures were addressed specially to Egyptian ladies) M. Quinton gave an account of his curative method, based on the analogy existing between sea water and the human plasma, and on the employment of injections of the Quinton plasma. He recalled the fact that, according to statistics, infantile diarrhoea was accountable during the summer for the death of 6,000 in 10,000 newborn infants at Cairo, and he afterwards set forth the results obtained in the dispensaries established in Paris and in London for the application of his method whereby the doomed infants were saved in a proportion of 80 per cent. A serious movement was at once begun in favour of the application of the Quinton method at Cairo. Princes of the Khedivial family at once declared themselves favourable to it. The Director-General of the Wâkfs promised a credit of 15,000 francs a month during three months for a trial of the method, and in May next M. Quinton intends to come back to Cairo with several experienced nurses in order

[1] *Bulletin de l'Academie de Médecine*, séance du 14 Mai, 1912.

to combat the diseases for which his serum is, according to him, a sovereign remedy. M. Quinton having a strong desire (for which I can only praise him in principle) to give a French character to the work which he wishes to undertake in Egypt, and having asked me to give him to the greatest possible extent the help of the diplomatic agency, I should be obliged to Your Excellency if you would be good enough to let me know the opinion of the Paris Académie de Médecine on the work and the method of M. Quinton." This communication was accordingly referred to the Académie de Médecine, and M. Wurtz drew up a report on the subject to the following effect: "It is known that the Quinton plasma is nothing else than sea water gathered under conditions of asepsis in the offing at Arcachon, and rendered isotonic by the addition of sterilized water. The Quinton plasma has already long been applied in the treatment of infantile diarrhoea, in particular by MM. Hutinel and Meunier. It sometimes gives good results when, as a consequence of profuse diarrhoea, there is great dehydration of the organism. It must be recognized, however, that physiological serum gives analogous results in these cases of deprivation of water and demineralization of the tissues. The Quinton plasma cannot therefore be considered either as a specific or as a panacea in infantile diarrhoea. Its use should not therefore replace in any way the ordinary prophylactic measures nor the rational treatment of the disease." The conclusions of the report on being put to the vote were adopted by the Academy.

THE TRIAL AND PROBATION OF JUVENILES.

THE Penal Reform League has recently addressed two memorials to the Home Office drawing attention to what is the logical outcome of the Children's Act of 1908 and the Probation Act of 1907. These Acts marked a notable advance. They established children's courts, in which all offenders under the age of 16 years are tried apart from adults, and provided that, instead of being committed to prison, children might be sent to detention or remand homes, free from the taint of prison life. But too often the children's court is the adult court; sometimes it is a room in the same building. And although, in theory, the exclusion of children's cases from adult courts keeps the young mind unpolluted by the scenes and language common in adult courts, the absence of separate waiting-rooms does much to minimize this advantage. The Penal Reform League pleads for the appointment of magistrates to deal exclusively with children, and for the gradual appointment of men with a special love for children and an innate instinct for understanding them. Then the supply of remand homes is inadequate. In many places there is only the workhouse. Staffed with efficient paid probation officers, aided by a band of voluntary helpers, the remand homes and children's courts would become invaluable centres of ever-widening social activity. The scheme of the Penal Reform League contains much of value, and if Government does no more than turn to it the deaf ear of formal politeness, it is to be hoped that the league will endeavour to organize a body of voluntary helpers throughout the country to keep young offenders under supervision. Such an association of voluntary workers has done much in some towns to help to reduce infant mortality, and there should be no insuperable obstacles to pressing forward this portion of the league's programme. Apart from the benefits such a body of workers would confer, they would help to educate public opinion and prepare the way for the other objects the league has at heart.

PARENTHOOD AND ALCOHOL

IN the May number of *Good Health*, Dr. Johnston, of Bolton, the author of a book on the wastage of child life, maintains that the chief causes of infantile mortality are ignorance of mothercraft and alcohol. He points out that by a minute of the Education Department, domestic hygiene, including in the term the care of infants, is to be a part of the education of elder girls, and that in the schools of Manchester over 8,000 girls are now receiving such instruction. There is no doubt that the ignorance and inexperience of undomesticated wives pave the way to the public-house, and to the alcohol which Dr. Johnston regards as the great cause of infantile mortality. Professor Bunge, of Basle, has stated that the daughters and granddaughters of a drunkard lose the power to suckle their offspring, and Dr. Johnston says he has found much evidence in favour of the contention. Whilst the evil influence of alcohol on child life must not be minimized, much less ignored, it is well to remember that a great diminution in the national consumption of alcohol, as shown by the drop of millions in the drink bill, has taken place. Excessive infantile mortality is the Nemesis of densely populated manufacturing centres where women go to work. Burnley and Preston, with an infantile death-rate of about 200 per 1,000, are probably as sober as Burton, where beer abounds; yet the infantile death-rate of the latter is about 120. As Alderman Broadbent, a pioneer in the work of child-saving, says: "We do with our women what no farmer would do with his cattle—make them do not double, but treble duty—bear children, go out to work, and attend to the household." Whilst all will agree with Dr. Johnston as to the pernicious effects of alcohol upon children, and with his recommendation that no healthy child ought to have alcohol, on the larger problem there is room for a broad-minded recognition of other factors, without losing sight of the share of alcohol to which Dr. Johnston so ably draws attention.

INSURANCE COMPANIES AND MEDICAL CERTIFICATES.

IN the JOURNAL of March 23rd last, page 696, we called attention to a communication from the General Accident Fire and Life Assurance Corporation, Limited, addressed to a policy-holder in reference to a servant who was incapacitated. In this letter the policy-holder was asked to hand the servant a form to be filled in by the doctor attending her, and the letter added: "We hope no fee will be asked for completing this paper, but we would mention that any such charge falls to be paid by the injured party, no liability attaching the assured in this direction." In commenting upon this we pointed out the invidious position in which members of the medical profession were placed by such a letter. The general manager of the corporation informs us that the terms of the letter were contrary to the practice of the company, that this particular letter was written by a clerk (who admits that it was an unbusinesslike and incorrect letter to write), and that the company has taken serious notice of the incident in the department from which the letter proceeded.

PROPOSED APPOINTMENTS BY SCOTTISH INSURANCE COMMISSIONERS.

ATTENTION is called to the Warning Notice issued as to two appointments of medical officers proposed to be made by the Scottish Insurance Commissioners. The acceptance of such appointments will be contrary to the policy of the British Medical Association.

THE death of Lord Lister having created a vacancy in the membership of the Royal Society of Science, Upsala, Sir Victor Horsley, F.R.S., has been elected his successor.

HIS MAJESTY has been pleased to approve of the special promotion of Colonel Sir David Bruce, C.B., F.R.S., M.B., F.R.C.P., to the rank of Surgeon-General, in consideration of his eminent services to the cause of science. Sir David Bruce is at present at the head of the Sleeping Sickness Commission appointed by the Government, with the advice of the Royal Society, to continue the study of the disease in Nyasaland.

THE INSURANCE SCHEME.

STATE SICKNESS INSURANCE COMMITTEE.

Ninth Meeting.

THE ninth meeting of the State Sickness Insurance Committee was held on May 16th.

Mr. T. JENNER VERRALL was in the chair, and the members present were: *England and Wales:* Dr. R. M. Beaton (London), Dr. John Brown (Bacup), Dr. T. M. Carter (Westbury-on-Trym), Mr. E. J. Domville (as Chairman of the Public Health Committee), Dr. S. Hodgson (Salford), Miss Frances Ivens, M.S. (Liverpool), Dr. Constance E. Long (London), Dr. R. A. Lyster (Winchester), Mr. James Neal (Birmingham), Dr. H. F. Oldham (Morecambe), Dr. James Pearse (Trowbridge), Dr. E. O. Price (Bangor), Dr. Lauriston E. Shaw (London), Dr. W. Johnson Smyth (Bournemouth), Dr. D. F. Todd (Sunderland), Mr. E. B. Turner (London), Dr. A. H. Williams (Harrow on the Hill), Mr. E. H. Willock (Croydon). *Scotland:* Dr. J. Adams (Glasgow), Dr. Bruce Goff (Bothwell), Dr. R. McKenzie Johnston (Edinburgh), Dr. J. Munro Moir (Inverness). *Ireland:* Dr. Mark F. Cahill (Belfast), Dr J. S. Darling (Lurgan). *Ex Officio:* Dr. J. A. Macdonald (Chairman of Council).

Apologies for absence for unavoidable reasons were received from the President of the Association (Professor Saundby), the Chairman of Representative Meetings (Dr. E. J. Maclean), Dr. F. W. Kidd (Dublin), Dr. D. G. Thomson (Thorpe, Norwich), and Mr. D. J. Williams (Llanelly).

We are enabled to publish the following account of the proceedings in anticipation of the confirmation of the minutes.

MINUTES.

The minutes of the last meeting of the Committee, held on May 9th, were confirmed and signed by the Chairman as correct.

RESIGNATION OF MEMBER.

A letter was read from Dr. F. W. Kidd (Dublin), resigning his membership on the Committee, on the ground of pressure of other engagements. The resignation was accepted with regret, and the Chairman of Representative Meetings was requested to follow the procedure adopted on previous occasions in filling up the vacancy.

PUBLIC MEDICAL SERVICE.

The greater part of the time of the Committee, which sat from 12.15 to 9.55, with short intervals for luncheon and dinner, was occupied in the consideration of two schemes for a Public Medical Service for the provision of medical attendance and treatment for (*a*) persons insured under the National Insurance Act, and (*b*) persons not so insured. The one scheme was based upon a capitation system of payment and the other upon a system of payment per attendance. After amendment both schemes were approved, subject to their final revision by a subcommittee consisting of the Chairman, Dr. Hodgson, the Solicitor to the Association, and the Medical Secretary. The subcommittee was empowered to issue the schemes as soon as this revision had been completed.

The Committee also had before it a communication from the National Medical Union, forwarding for information a draft public medical service scheme based upon a payment per attendance system. With regard to this the Committee adopted the following resolution:

> That the National Medical Union be thanked for the great trouble it has taken in preparing a scheme, the merits of which the Committee fully appreciates, and be informed that the Committee has considered its scheme, but is unable to recommend it for general acceptance because any service based upon the payment per attendance system must have some relation to that based on the capitation system, and the Committee does not feel that the scheme of the Union would harmonize with the capitation system scheme prepared by the Committee.

SUPPLEMENTARY PLEDGE.

The Committee had before it several letters of inquiry with regard to the terms of the supplementary pledge. With regard to its terms, the Committee arrived at the decision that as it had drawn up the form of supplementary pledge and of resignation of club appointments after very careful consideration with a view to their application to all parts of the country, it could not approve of any variation of this document, but at the same time it did not consider it to be within its province to interfere with action taken locally with a view to still further strengthening the supplementary pledge. At the same time the Committee put it on record that it would take care that a very considerable percentage of the pledges shall be signed before actual use is made of them.

MEDICAL MEMBERS OF COUNTY AND COUNTY BOROUGH COUNCILS.

A communication was read from a member pointing out that county and county borough councils would be asked by the Local Government Board to prepare a scheme for dealing with tuberculosis in accordance with the report of the Departmental Committee, and asking whether medical practitioners, members of public health committees and such councils, could act as members of such committees without violating the pledge given to the Association. The Committee resolved to reply that it was of opinion that in the circumstance the undertakings given to the Association would not be violated by acting upon such committees.

RESTORATION OF MEDICAL BENEFITS IN IRELAND.

A communication was received from the Honorary Secretary of a county Medical Committee in Ireland with regard to the restoration of medical benefits in that country. The Committee resolved to inform the Honorary Secretary that it has always been the policy of the Association to press for the restoration of medical benefits so far as Ireland is concerned, and that, though hitherto it had not been possible to obtain such restoration, the Association would lose no opportunity of pressing for it.

REMUNERATION.

Attention was called to the notification by the Commissioners to the effect that they had appointed a Subcommittee to investigate and collect information as to the conditions of remuneration prevailing in general medical practice throughout the United Kingdom (SUPPLEMENT, May 18th, p. 538). The Commissioners notified that they would welcome information or representations from medical or other associations, or persons prepared to submit statements of fact or to tender evidence on the question of remuneration. The Committee resolved to address the following letter to the Joint Committee of Commissioners:

> British Medical Association,
> 429, Strand, London, W.C.,
> May 16th, 1912.
>
> Sir,
>
> I am desired to inform you that the State Sickness Insurance Committee, noting the decision of the Commissioners to form a Subcommittee to collect information as to the amount of remuneration received in the past by the profession for medical services rendered to patients of the class likely to be insured under the Act and entitled to receive medical benefit of the normal type, desires at once to draw attention to a fallacy which would arise if such information were regarded as a guide to the remuneration which would be acceptable to the profession in connexion with the Act.
>
> Present rates of remuneration from such classes are largely determined by the financial position of the patient, and the feeling on the one hand of compassion for the patient, and on the other of fear of having to undertake entirely unpaid work, which are present to the mind of the doctor. The altered financial condition of the patient by the introduction of compulsory assisted insurance removes or lessens both these factors.
>
> I am, Sir,
> Your obedient Servant,
> ALFRED COX,
> Medical Secretary.
>
> The Secretary,
> National Health Insurance Joint Committee,
> Buckingham Gate, S.W.

To this letter the following reply has been received:

National Health Insurance Joint Committee,
Buckingham Gate,
London, S.W.,
May 21st, 1912.

Sir,

In reply to your letter of the 16th inst., I am directed to state that the subcommittee of the Insurance Commissioners on the subject of medical remuneration will not be confined to inquiring into the amount of remuneration received in the past by the profession for medical services rendered to a class of patients likely to be insured under the Act, and entitled to receive medical benefit of the normal type. It will be their duty to collect evidence of any kind that will assist in the decision as to what would be proper remuneration for the services to be rendered under the Act.

The words used by the Chancellor of the Exchequer in announcing this inquiry were as follows:

A subcommittee has therefore been appointed by the Commissioners to go specially into this question and to collect evidence bearing upon it. They will welcome any assistance which the medical profession can give them in collecting these facts, and also which can be given by friendly societies and others who have any data bearing upon it. The subcommittee will communicate to the members of the Advisory Committee, and also to any organizations whose assistance they require, particulars of the procedure which it is proposed to adopt, and the ways in which assistance can best be given, and, of course, they will consider any suggestions as to the form of inquiry which any of these bodies may think well to put before them. The one object is to conduct an inquiry which all concerned will be satisfied is both equitable and thorough.

One word more before leaving this part of the subject. It must be clearly understood that this inquiry will be simply a collection of facts, and will be without prejudice to any arguments which the medical profession or others may desire to base upon the facts when the time comes for considering what the nature of the financial provision in this respect ought to be.

Before commencing the inquiry, the Commissioners hope to have the benefit of a conference with representatives whom they trust the British Medical Association will appoint to confer with them on the nature and procedure of the inquiry, when all such points as are raised in your letter may be fully discussed and considered.

I am, Sir,
Your obedient Servant,
(Signed) W. J. BRAITHWAITE.

PROVISIONAL MEDICAL COMMITTEES.

The CHAIRMAN reported that information had been received that 117 Provisional Medical Committees had been actually formed in England, Scotland, and Wales.

NEXT MEETING.

The next meeting of the Committee was fixed for Thursday, May 23rd.

CONFERENCE WITH MEDICAL MEMBERS OF THE ADVISORY COMMITTEE.

On Friday, May 17th, at 9 a.m., a further informal conference took place between members of the State Sickness Insurance Committee and some of the medical members of the Advisory Committee not nominated by the Association. Dr. J. A. MACDONALD, who was in the chair, commented on the fact that the agenda paper, which was accompanied by certain memoranda, for the medical benefit section of the Advisory Committee had only been received on the previous day, by the majority of members in the afternoon, and several members who had travelled various distances from the country stated that papers had not reached them.

Some conversation then took place with regard to the subjects likely to be discussed and the views of the British Medical Association thereon.

THE annual dinner of the Indian Medical Service will be held at the Hotel Cecil on Thursday, June 13th, at 7.45 p.m., Surgeon-General J. P. Greany in the chair. The service will have the honour of entertaining as their guest Sir Richmond Ritchie, K.C.B., Permanent Under Secretary of State for India. Applications for dinner tickets should be made to Lieutenant-Colonel P. J. Freyer, Honorary Secretary, 27, Harley Street, W.

Medical Notes in Parliament.

[FROM OUR LOBBY CORRESPONDENT.]

Feeble-Minded Persons (Control) Bill.

ON May 17th this bill came on for second reading, and the discussion occupied the whole of the sitting. As a private member's bill, it was lucky to secure in the end a second reading, in spite of the suggestion of the Home Secretary that it should be put aside in favour of the Government bill, introduced the day before. The interest in the subject was so strong that the second reading was allowed, and the bill will now probably be considered in Committee at the same time as the Government measure.

Mr. Stewart, in moving the second reading, said the bill was the outcome of the Royal Commission appointed in 1904, which reported in 1908. The recommendations of the Commission were far too wide-reaching for a private member's bill, but the present proposal met one of their recommendations and was a step forward in the segregation of the unfit. It proposed to regulate the lives, and if possible to prevent the propagation, of half-witted people. By the bill the term "feeble-minded" did not include lunatics, idiots, or imbeciles. It gave powers to the Commissioners in Lunacy to license homes, residential schools, institutions, or colonies, for the purpose of the detention of persons certified as feeble-minded. The whole bill, he said, lay in the eighth clause, which empowered any stipendary magistrate or justice of the peace, upon application made, to order the removal of the feeble-minded person to a licensed home, school, institution, or colony, provided that the magistrate was satisfied that the person had attained the age of 16 and was in need of further protection and control, and was a source of mischief and injury to himself or others, and provided also that the person had been independently examined and certified by two registered medical practitioners. The number of mentally defective people in this country was, he believed, about 282,000, or 0.83, or nearly 1 per cent. of the population. He mentioned a case where sixteen women of defective mind gave birth in a workhouse to 116 illegitimate children. The ratepayers had to carry the burden from the day they were born till the day they died, and this in addition to their own proper burdens. From this cause the cost of hospitals, homes, schools, prisons, and police was largely augmented, while the guardians had extra work thrust upon them and prodigious expense was incurred by the community. He urged Parliament to insist on some action in order to prevent the deterioration of the race.

Mr. Dickinson seconded.

The Home Secretary welcomed the discussion as useful in bringing about legislation. He showed how great was the evil to be remedied, and how it could be done in properly managed homes. If, therefore, unable to give a very hearty welcome to this particular bill it was not because he thought the subject ought not to be dealt with, but because he could see that this particular proposal would hardly effect the object in view. He recognized to the full that that was not the fault of the promoters of the bill. If they had power to get the money to provide the necessary organization for the bill it would be a different matter. As it was they could not provide the necessary homes. Now, the Government had the money and the necessary powers, and therefore he felt justified in advising the postponement of the measure. He had produced on behalf of the Government a bill which provided for a material contribution by the Exchequer for the purpose of making homes and of providing for their maintenance. The Government bill also would carry out the recommendations of the Royal Commission, which the bill before the House could not do. Later on he said: "It would not be in order for me to discuss on the second reading of this bill the precise proposals of my bill, but the Government bill is before the House. It deals with the subject on a far more comprehensive scale, and it is the firm intention of the Government to proceed with their measure in the course of the present session. Shall we be assisted by accepting this bill? In certain circumstances there might be an advantage in sending two bills on the same

subject to a committee and perhaps combining them, but inasmuch as all the objects of the present bill are included in the Government bill, and, owing to financial power, will be carried out far more effectively by it, I think it would be undesirable to proceed with these two bills at the same time. But I have no hostility to the bill, and, personally, if hon. members wish to push the measure to a division, I certainly should not vote against it."

Mr. Lyttelton spoke strongly in favour of the bill, while Mr. Wedgwood opposed it in the interests of the liberty of the subject, and Mr. Manfield also opposed it as a measure inadequate for the evil to be cured. After several other members had spoken,

Dr. Chapple rejoiced at the recognition of the importance and urgency of the subject, and upon the fact that there had been brought to light a bill which otherwise might have slumbered in the archives of the Home Office. Objection had been taken to the absence from the bill of any definition of feeble-mindedness; but although no definition of insanity was to be found anywhere, there were many asylums for the insane. A feeble-minded person was a person born with an arrested brain development, and the characteristic of almost all such persons was a lack of self-control. The proposal embodied in the bill was to supply an artificial control in such cases. No lessons should be taught to feeble-minded children. To tell them that 2 and 2 made 4 was folly, and to insist that they should learn and remember it was persecution. The attempt should be made to train their hands, and whatever mental development they were capable of should pass through their hands to their minds. The whole object of the bill was humanitarian, and there was no persecution in saving feeble-minded persons from themselves. The mentally defective were increasing in proportion because of the emigration and relative decline in the marriage-rate of the best people from the mental and physical point of view, and that fact impressed the importance and urgency of the question.

The bill was then read a second time without a division and referred to a standing committee.

National Insurance Act.

Treatment of Consumptive Patients.

Sir Thomas Esmonde asked the Chancellor of the Exchequer what steps should be taken by Irish boards of guardians to obtain grants for the treatment of consumptive patients, either in sanatoriums or in the local infirmaries, or for making better provision for their treatment in connexion with the local infirmaries. Mr. Masterman replied that under Section 16 of the National Insurance Act local Insurance Committees were prohibited from making arrangements with Poor Law authorities for the treatment of insured persons. With regard to the distribution to local authorities or other bodies of the sum available for the provision of, or making grants in aid to, sanatoriums and other institutions, in accordance with Section 64 of the National Insurance Act and Section 16 of the Finance Act, 1911, he understood that the Irish Local Government Board were preparing a circular to be addressed to county councils in Ireland dealing with the subject.

Nurses in Private Practice.

Sir Archibald Williamson asked the Secretary to the Treasury whether his attention had been called to the statement of one of the official lecturers that a midwife working on her own account, and subject to no authority but the Central Midwives Board, was exempt from the compulsory clauses of the National Insurance Act, while a nurse in private practice would be compelled to insure, because she was subject to the authority of the medical man in charge of her case; and whether, in view of the number of nurses interested, he would say if the above statement was a correct description of the position of the nurses referred to. Mr. Masterman said that he understood the lecturer in question indicated the liability to compulsory insurance depended upon the actual circumstances attending engagement. Apart from special grounds of exclusion, those who were employed under contract of service must be insured. In view of the different terms and conditions under which nurses and midwives worked, no general statement could be made which would apply in every case. The Commissioners would, however, issue a statement at as early date as possible dealing with the main classes of engagement as nurses.

Medical Treatment of Children.—Mr. Edmund Harvey asked the President of the Board of Education whether, in making grants in aid of the medical treatment of children, he would take into account the activity or otherwise of local authorities in making and enforcing by-laws dealing with the employment of children. Mr. J. A. Pease said that the answer was in the negative. The hon. member would find the circumstances which would be taken into account in making the grant referred to set out in the regulation already issued, from which he did not propose to depart.

Death-rate of Children.—Mr. Keir Hardie asked the President of the Local Government Board whether he could give figures showing the death-rate during the months of March and April of this year and the figures for the corresponding months of last year, distinguishing where possible the death-rate amongst children in the following districts: counties of Glamorganshire (South Wales), Lanarkshire (Scotland), Lancashire, Yorkshire, Durham, and Northumberland. Mr. Burns answered that figures for March and April were not available, but the following table gave the death-rates and the rates of infantile mortality during the three months ended March 31st, 1912, and the three months ended March 31st, 1911, so far as England and Wales were concerned:

	Death-rate per 1,000 Persons Living.		Deaths of Children under 1 year of age per 1,000 Births.	
	1912.	1911.	1912.	1911.
Glamorganshire ...	16.7	15.4	156	121
Lancashire	18.3	17.4	128	118
Yorkshire	16.3	17.2	109	127
Durham	15.4	16.3	113	126
Northumberland ...	15.6	16.0	102	124

For figures relating to Lanarkshire, application should be made to the Secretary for Scotland.

Infants Born Blind (Scotland).—Mr. Dundas White asked the Secretary for Scotland if he could give, for each year from 1901 to 1911 inclusive, the number and the percentage of the total births of infants registered as blind. Mr. McKinnon Wood replied that he was unable to give the particulars asked for, as the register of births did not contain any data as to infants born blind. In answer to a further question, Mr. Wood said the only information as yet available on these subjects was to be found in the report of the 1901 Census. In the Census of last year particulars were asked regarding the "totally blind," and the results would be tabulated and published in ordinary course in the third volume of that report.

Vivisection (Royal Commission).—Mr. George Greenwood asked the Secretary of State for the Home Department whether his attention had been called to the observations of the Royal Commission on Vivisection in their final report with regard to Dr. Pembrey and Dr. Klein, to the effect that in the case of Dr. Pembrey his application of a theory of pain as a protective mechanism in the scheme of nature to the case of painful experiments on animals had led him into a position which was untenable, and which, in their opinion, was absolutely reprehensible, and that it appeared to them that to grant a licence or certificates to any person holding such views as those formerly expressed by Dr. Klein, and as those entertained by Dr. Pembrey, was calculated to create serious misgivings in the minds of the public; whether Drs. Pembrey and Klein, or either of them, now held licences and certificates, and, if so, what certificates under the Cruelty to Animals Act, 1876; and whether he intended to take

steps to give effect to the opinion expressed by the Commissioners with regard to them. Mr. McKenna replied that, as he recently stated, the licences of these two gentlemen were renewed and their certificates continued for the current year before the report of the Royal Commission was published. Dr. Klein held certificate A, and Dr. Pembrey certificates A (two), B, C (two), E, and EE. He could at present only say that all the recommendations of the Royal Commission were being carefully considered.

Irish Poor Law Reform.—Mr. Meagher asked whether, in the event of the Irish Parliament taking steps to reform the present Poor Law system in Ireland and make it in accordance with Irish necessities and conditions, the existing Irish Poor Law officers would be considered as Irish officers within the meaning of the Act. Mr. Birrell replied that, in the event of the Irish Parliament taking steps to reform the present Poor Law system, it would be open to them to make proper provision for the existing Poor Law officers, and there was no reason to anticipate that they would omit to do so. The Government of Ireland Bill made no alteration in the Poor Law system or the position of Poor Law officials, and it would therefore be impossible to deal with them as Civil servants are dealt with in that bill.

Miner's Nystagmus.—Mr. Lynch asked the Home Secretary whether he was aware that last year 1,618 men in the United Kingdom received compensation in regard to miners' nystagmus, and that in a paper presented to the Royal Society, Dr. Llewellyn attributed the disease in great part to defective light; and whether he would take steps to have the whole question of the illumination of mines investigated, as, for example, by a Special Commission. Mr. McKenna said the figure in the question was that for 1910, as given in the Home Office statistics; the figure for 1911 was not yet available. He was aware of Dr. Llewellyn's researches, and understood that they were still being continued. The illuminating power of miners' lamps was one of the matters which would be taken into account in approving lamps under the provisions of the new Coal Mines Act, and the point was under the consideration of the Committee which was now engaged in formulating the test. He also hoped that the competition which was now proceeding for the prize offered for the best electric miner's lamp would help greatly towards an improvement in the illumination of mines. He did not think there was a case for instituting a further special inquiry at the present time.

Vaccination (Ireland).—Mr. William Abraham asked the Chief Secretary whether he was aware that the Local Government Board (Ireland) sent a letter to the Athy Board of Guardians in reference to their proceedings of April 17th, 1912; that in that letter the Local Government Board asserted that pure vaccine lymph was supplied from their vaccine department to the medical officers of the various unions; whether such letter was issued with his sanction; and whether he was prepared to guarantee the purity of the vaccine issued in Ireland. Mr. Birrell said the facts generally were as stated in the question. The Local Government Board's bacteriologist, before certifying that the glycerinated calf lymph prepared at the National Vaccine Institute was fit for use, satisfied himself as to its absolute purity and freedom from harmful germs, and the Board were thus in a position to guarantee the purity of the lymph distributed to medical officers for public vaccinations in Ireland.

Vaccination (India).—In reply to Mr. George Greenwood, the Under-Secretary of State for India said that in the Punjab the Indian Vaccination Act XIII of 1880 was in force in the larger towns and in the military cantonments. A parent who neglected without just excuse to obey the order of a magistrate directing him to have his child vaccinated was punishable with fine, which might extend to Rs.50. If again convicted for breach of a similar order in respect of the same child, he might be sentenced to simple imprisonment up to six months, or to pay a fine not exceeding Rs.1,000, or to both. For the first offence the offender was not liable to imprisonment except in default of payment of the fine.

Women's Medical Service, India.—Mr. H. W. Forster asked the Under Secretary of State for India whether the Government of India had approved the scheme drawn up by Surgeon-General C. P. Lukis, K.C.S.I., for the formation of a service of medical women for India; and, if so, when would the scheme come into operation. Mr. Montagu said the answer to the first question was in the negative. The Government of India had under consideration a scheme for the formation of a Women's Indian Medical Service which was submitted to the Secretary of State by certain ladies interested in the practice of medicine, but it had not yet expressed its opinion upon it. In reply to a question as to urgency, Mr. Montagu said that there was a considerable amount of interest manifested in it, and he had telegraphed that morning asking when a reply might be expected.

Sleeping Sickness.—Dr. Chapple returned to his question about destroying game, on the ground that it was a reservoir for the propagation of sleeping sickness, but Mr. Harcourt said he had nothing to add to the full answer given in April. Dr. Chapple retorted that no action was promised in the reply referred to and that the sufferings from this disease had grown to be very serious. Mr. Harcourt said he would not for a moment deny the seriousness of the spread of the disease; he was waiting for information sufficiently definite to justify him in destroying species, either of wild or domestic animals. The evidence, so far as it had gone at present, tended rather to prove that wild animals, domestic animals, and man were all carriers of the disease.

City of London Association.—Mr. Ashley asked why all the medical units of the City of London Territorial Force Association were to have their headquarters and train outside their geographical area, at the Duke of York's headquarters, Chelsea. Colonel Seely said that all the units of City Association are outside the City area except the 1st London Brigade, Royal Field Artillery, which would also shortly move out of the City boundaries. It was considered impracticable to find headquarters within the City boundaries. In answer to a further question Colonel Seely said there were a great many considerations involved, but it was quite true that the question of expense came in.

Political Offenders (Prison Treatment).—Dr. Chapple asked the Secretary of State for the Home Department whether, in view of the divergent opinions as to the alleged danger, suffering, and degradation of the forcible feeding of prisoners, he would hold an inquiry into the prison treatment of political offenders. Mr. McKenna replied that he did not think an inquiry was necessary. The law was clearly laid down in the case of Leigh *v.* Gladstone, and the process of forcible feeding was a matter of ordinary medical practice carried out daily in hundreds of cases in asylums, and in a smaller number of cases in hospitals, prisons, or private practice. There was no danger to life or health from the process of feeding by tube; where there was any danger it arose from the violent resistance sometimes offered by prisoners who had gone to prison while suffering from heart disease or broken down in health. Such cases were carefully observed by the medical officers, and where it had been really necessary he had authorized the prisoner's discharge.

THE medical officer of health for Islington has issued a leaflet on the house-fly, in which attention is drawn to the risk of conveyance of infection which its undue prevalence is known to involve, and the public are invited to wage war on flies and their breeding places. The main recommendations as to domestic precautions are to keep dustbins tightly covered, to sprinkle petroleum or chloride of lime over the contents of the dustbin, or a solution of 1 oz. of formalin and 10 oz. of water, to sweep the floors, especially of rooms in which food is eaten, so that no fragments remain, to burn all animal or vegetable refuse daily in the kitchen fire, and to get rid of all old bedding, rags, paper, straw, and like refuse. As to horse manure, it is recommended that it should be kept in fly-tight receptacles and removed twice a week.

England and Wales.

[FROM OUR SPECIAL CORRESPONDENTS.]

BRISTOL.

OPENING OF THE NEW BUILDINGS OF THE ROYAL INFIRMARY.

THE fact, made known by the Lord Mayor at the council meeting on May 13th, that the King had promised to open the new buildings of the Royal Infirmary, was generally received with much satisfaction, if not with a little surprise. At the present moment the building is far from completed, but with six weeks before them the Committee can no doubt remedy this fault. Indeed, everything that is possible is being done to hurry on the work towards completion. The new buildings will be devoted to the surgical side of the work, and will be provided with all the most recent improvements. The exterior is rather severe in character, with little architectural embellishment. The accommodation for the nurses of the institution has been much increased, and a most delightful garden laid out in terraces has been constructed. For the royal visit a large representative committee has been formed and numerous subcommittees, but at present the details of the visit are not definitely fixed.

BRISTOL EYE DISPENSARY.

The second oldest medical institution in Bristol celebrates its hundredth birthday this year, having been opened on September 29th, 1812. Its first habitation was in a house that stands at the corner of Frogmore Street and Pipe Lane, a house of antiquarian interest from being part of the hospital of the Gaunts, and having a niche in the outside wall from which the statue of the Virgin and Child has long disappeared. The founder was John B. Estlin, a Bristol surgeon, a contemporary and friend of Southey, Coleridge, and Robert Hall, and a well-known pioneer in ophthalmic surgery. At first self-supporting, it was found necessary later to obtain subscriptions, but even to the present day the expenses are small. Mr. Estlin continued his connexion with the institution till about 1849, having five years before received assistance from his nephew, the late Mr. Augustin Prichard, and son of James Cowler Prichard, the well-known ethnologist. In one of the earliest reports (1816) reference is made to the large number of cases of eye disease occasioned by small-pox, and only two years after, owing, no doubt, to his advocacy of vaccination, in which Mr. Estlin was a firm believer, it is stated that no cases of this nature had come under his observation. In 1855 Mr. Crosby Leonard joined the staff, and in 1869 Mr. Arthur Prichard, son of Augustin, was taken there as apprentice to his father. In 1870 the work was transferred to a house in Orchard Street, which stands in the former garden of the Gaunts Hospital. After nearly sixty years' work Mr. Augustin Prichard's connexion with the hospital ended, and since that time the staff has, in consequence of the greater amount of work, been considerably enlarged. Mr. Arthur Prichard, who began, as above stated, in 1869, became full surgeon in 1877, and still continues his connexion. For 100 years the institution has been opened every Monday and Wednesday, except for three Wednesdays: once when there was a prize fight on the Downs, a second time when Queen Victoria visited Bristol, and the third time on the Proclamation Day of our present King. Over 170,000 patients have been seen in this period.

LONDON.

LONDON COUNTY COUNCIL.

The Eleventh Asylum for the Insane.

MATTERS having reached a sufficiently advanced stage, the Asylums Committee of the London County Council on May 21st asked for an estimate of £517,970 on capital account for the building and equipment of the eleventh asylum for patients in the county of London. The committee stated that the working drawings had been informally approved by the Lunacy Commissioners, with the exception of some minor matters of detail. It had been thought desirable to make provision in the plans for a hospital on each side of the asylum for 30 male or 30 female phthisical or dysenteric cases, and the total accommodation would therefore be 2,066 beds. The cost per bed, including an apportionment of the cost of an electricity generating station, worked out as follows:—Horton, £243; Long Grove, £247; and the new asylum (estimated), £235. At the request of the Finance Committee, the Asylums Committee had considered the practicability of building the new asylum in sections. The expense would be somewhat greater, and the only reason for building in sections would be uncertainty that the full accommodation would be required from the first. The asylum was hardly likely to be ready in less than four or five years from now, and the Committee had therefore gone into the question of the probable number of lunatics for whom it would be necessary to find accommodation by January, 1917. The numbers had increased from 16,957 in 1903 to 20,429 in 1912, the average rates of increase having been for the last ten years, 414; for the last five years, 318; for the last three years, 238. The increase in the last two years had been influenced by the larger number of patients transferred from London county asylums to institutions controlled by the Metropolitan Asylums Board, where there existed many vacancies which had now been filled. Any great assistance in this direction, therefore, could not be expected. The Committee felt justified in taking at least the average annual increase for the last five years—318, and on this basis the number of patients requiring accommodation in five years time would be 2,014, this number being arrived at by adding to the number of patients at present boarded out—424, the total of a five years' increase of 318—namely, 1,590. By the time the asylum was built, equipped, and ready for occupation, there would be a sufficient number of patients to fill it.

The estimate of £517,970 was approved.

Medical Treatment of School Children in 1912–13.

The Council was occupied for the first eight hours of the sitting by consideration of the education estimates. Meals for school children were calculated to cost £81,450, medical inspection and treatment £45,675, and special schools as follows: For blind children £9,590, deaf £17,165, mentally defective £55,060, physically defective £43,020, epileptic children £2,460. The estimate for medical inspection showed an increase of £4,000 over the amount spent last year. For medical treatment an increase of £1,260 was provided in respect of children suffering from ear, eye, and skin ailments. Provision was included for three new centres for dental treatment of 5,000 children at an additional cost of £1,470. On the receipts side the Finance Committee reported that it had included £20,000 as the proportion for London of the promised Government grant of £60,000 in respect of medical treatment in England and Wales.

An amendment calling for a supplemental estimate of £5,000 for dental treatment was moved by Mr. Jephson, who criticized the delay in making substantial progress in this matter. He said that at present only about 15,000 out of half a million children requiring dental treatment were receiving it. The proposal was rejected. Mr. Holmes then moved to reduce the estimate for medical treatment by £5 on the ground that a great part of the money now being spent on the hospital scheme was wasted. Mr. Matthew, who seconded, stated that only at the London Hospital was a nurse in regular attendance for the purpose of seeing that the children understood the instructions received and that the doctor's prescriptions did not go to the wrong children—a thing of frequent occurrence elsewhere—and the inference was that all the other hospital schemes were to some extent ineffective. Mr. Gautrey expressed some doubt as to whether the Finance Committee had not, in effect, reduced the estimates for medical treatment this year by £5,000 or more through over-estimating the amount likely to be received from the Government grant. He believed the share of London of the £60,000 would be not one-third but one-sixth. Mr. Cobb, the Chairman of the Education Committee, in reply, quoted Mr. Pease's remarks to the deputation from the British Medical Association last week, that the present system, though not an ideal one, was doing good work. He claimed that the working of the present schemes was being improved month by month. The new medical officer was taking up the question from a new point of view and

was giving the Committee every assistance. This remark drew from Mr. Cotton the inquiry: "Is the Committee giving the new medical officer every assistance?" The amendment to reduce the estimate was lost. The whole of the estimates set down were approved.

The Board of Education and the Hospital Scheme.

At the meeting of the Education Committee on May 22nd the receipt of a long letter from the Board of Education relative to recent proposals of the Council for continuing and extending the present system of medical treatment of school children was reported. The Board stated that it was not satisfied that the establishment of a large number of medical treatment centres, under conditions similar to those existing at the centres managed by medical practitioners at Norwood and Wandsworth, was, in all respects, desirable. The constitution of these centres should be modified in several important respects—principally with a view to the Council exercising a larger measure of control—if they were to form an integral part of the London system of co-ordinated inspection and treatment. In promising to consider favourably, on receipt of further information, a proposal to enter into arrangements for treatment with the Metropolitan Hospital, the Board said it had always regarded the schemes of this nature as provisional and experimental, and it hoped it might be found possible, in most cases if not in all, to transfer to local clinics or centres some of the work now done by the hospitals, thus restricting the hospitals to treatment which could not be properly and adequately undertaken by a school clinic. The Board added that it fully appreciated the efforts of the Council in regard to the medical treatment of school children, and realized the difficulties the authority had encountered in its endeavours to frame a comprehensive scheme to this end. Whilst the Board was anxious to aid in those endeavours, it thought it desirable that the opportunity should now be taken to place the whole scheme on lines which would lead by a natural development to the establishment of a sound and satisfactory system; otherwise both the Board and the Council might find themselves committed to a policy which it might be difficult subsequently to modify, and which might prove unsuited to the needs of the area. The Board asked for a conference on the whole question between its officers and representatives of the Council.

The Education Committee appointed five of its members to take part in the conference on May 23rd.

BIRMINGHAM.

TREATMENT OF TUBERCULOSIS IN BIRMINGHAM.

THE recommendations of the Departmental Committee on Tuberculosis have been considered by the Public Health and Housing Committee of the Birmingham City Council. Most of these recommendations have already been adopted in this city. The committee propose to provide for increased accommodation at Salterley Grange, Cheltenham, and for an extension of the sanatorium in Yardley Road. The latter extension will involve an expenditure of about £30,000. The existing accommodation is for 60 patients, but the new scheme will provide for 145 adults (73 males and 72 females) and 70 children. Provision will be made in a separate establishment for more advanced cases of the disease. An enlargement of the dispensary arrangements will be necessary, and the committee has decided to acquire the offices of the Water Department in Broad Street, which are about to be vacated. Between 2,000 and 3,000 persons, who have been previously under treatment at Yardley Road, will be able to be treated with tuberculin weekly at the proposed dispensary. At Salterley Grange, which holds forty-eight patients, provision will be made for another twenty patients.

BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

The ninetieth annual meeting of this society was held at the Medical Institute, Birmingham, on May 16th, the President, Mr. W. F. Haslam, being in the chair. The annual report showed that the invested funds amounted to £16,178, and that there was a balance on the year's work of £76, the total income being £787. Twenty-six annuitants had received grants varying from £36 to £18; and the sum expended in this way was £677. Two annuitants had died, so that at the end of the year twenty-four were receiving grants. Some of the annuitants had received large sums in the past, at least six having had over £1,000 given to them in yearly grants. The total number of benefit members at the end of the year was 375, and of these only 218 were annual subscribers, the remainder having compounded or paid up their subscriptions for twenty-one years. Many of the members who were fully paid up gave annual donations. Six new members were elected during the year, six died, and eleven left from various causes. Attention was drawn to the very large number of medical practitioners in the district who had not availed themselves of the society, and the directors urged all who were interested in the welfare of their professional friends who were not members to make an especial effort to induce them to join. Dr. Langley Browne was elected President; Mr. Frank Marsh, President-elect; and Dr. Quirke of Handsworth, and Dr. Bernard Rice of Leamington, Vice Presidents. Mr. W. F. Haslam and Mr. Frank Marsh were re-elected Treasurers; Dr. Stacey Wilson, Honorary Auditor; and Dr. Sawyer, Honorary Secretary. Sir Robert Simon, Dr. Malins, and Dr. A. S. Underhill were elected members of the Court of Directors.

HEALTH OF BIRMINGHAM.

At the census the population of Birmingham was found to be 840,202. During the first quarter of 1912 the births numbered 5,618, giving a birth-rate of 26.5 per 1,000, and the deaths numbered 3,436, which is equal to a death-rate of 16.2. The infant mortality was at the rate of 125 per 1,000, which is not so good as in 1911, but is probably due to the very cold weather experienced about the middle of February. The mortality from the more important of the infectious diseases was: Enteric fever, 5; small-pox, 0; measles, 8; scarlet fever, 19; whooping-cough, 184; and diphtheria, 24. Since January the notification of all cases of tuberculosis of the lungs has been compulsory, and 1,386 cases have been notified. The number of deaths from consumption was 330.

LIVERPOOL.

PRESENTATION TO MR. F. T. PAUL.

AT the close of the past academic session F. T. Paul, F.R.C.S., was presented with his portrait in oils, on his retirement from active service at the Royal Infirmary. His association with the Royal Infirmary has extended over a period of thirty-eight years, and for a long period he was senior honorary surgeon. The presentation was made at a dinner presided over by Mr. R. A. Bickersteth, and attended by a large gathering of medical men. In making the presentation Mr. Bickersteth spoke of Mr. Paul's many-sided good qualities, his brilliance as a surgeon, his sound surgical judgement, the dexterity and gentleness of his work and the sincere interest he took in his patients' welfare. The gift was an eloquent expression of the regard and admiration in which he is held by his colleagues at the infirmary and the medical profession of Liverpool and the surrounding districts.

The portrait is from the brush of Mr. G. Hall Neale, and is at present on exhibition in the Royal Academy.

Sir James Barr and Dr. R. C. Brown of Preston also spoke in support of the toast of Mr. Paul's good health.

Mr. Paul responded in graceful terms and said that he would value the gift for the sake of the donors, and thanked them on behalf of himself and family.

The evening was a great success, and there were several excellent musical items.

Ireland.

[*FROM OUR SPECIAL CORRESPONDENTS.*]

RICHMOND ASYLUM.

AT the last meeting of the Joint Committee of the Richmond District Asylum it was announced that the new infirmary wing was finished. The buildings had cost £63,000, showing a saving of £26,000 on the original estimate, largely due to the rearrangement of the plans by the resident medical superintendent. The following report of the Finance Committee on the question of promotion on the medical staff caused by the death of the late Dr. Cullinan was adopted. Though Dr. Eleanora Lilian Fleury, in charge of the Female Home, Richmond, was

next in seniority, the committee did not consider it advisable that the position of medical officer in charge at Portrane should be held by a lady doctor, and therefore recommended that Dr. Fleury should be granted a special increase of £50 per annum, and that she should have the title of first assistant medical officer. Dr. J. M. Redington was recommended to the position at Portrane on the same terms as his predecessor, and Dr. Forde was transferred to Richmond and promoted to position of second assistant medical officer at a salary of £320 per annum, with annual increments of £20 to a maximum of £400. Dr. Sammon was promoted to position of third assistant medical officer and transferred to Portrane at a salary of £200, with yearly increments of £20 to a maximum of £300. Dr. Dwyer and Dr. Sheridan were promoted to positions of fourth and fifth assistant medical officers, and an advertisement was issued to fill the position of sixth assistant medical officer at a salary of £120 per annum, rising to a maximum of £200 by annual increments of £20.

National Insurance Act.

A meeting of representatives of the various maternity hospitals was held in Dublin last week to consider the position of these hospitals under the Insurance Act. After discussion, Dr. Henry Jellett, Master of the Rotunda Hospital, was asked to draw up amendments to the existing regulations and bring them before the Insurance Commissioners, and also to bring to their notice the very large number of maternity cases that are attended annually by the students of the maternity hospitals in single-room tenements.

Flies and Disease.

Sir Charles Cameron, Medical Superintendent Officer of Health for Dublin, has written to the press warning the public of the danger of the common house-fly as a carrier of disease. The Public Health Committee is now grappling with the danger, he says, by purchasing bagsful of dead flies (we believe at the rate of 1d. per 1,000). He asks the public to aid the committee by endeavouring in every possible way to destroy the flies, and suggests the use of fly-papers, or formalin (1 part to 3 of water) in plates, and also excluding flies from the house by having the open space in the windows covered by muslin. Another writer suggests covering the window spaces with wire netting of about ¾ in. mesh, which he says the flies will not penetrate, provided there is no light visible to the flies outside. The advantage of the wire netting (if really effective) over muslin is evident from the fact that it would not exclude the light and air at the same time. It would be an inestimable blessing if the hospitals could be kept free of flies in some such way.

Dublin Sanitary Association.

At a recent meeting of the Dublin Sanitary Association, attention was drawn to the careless and clumsy way in which offensive manure is commonly carted through the city, so that the roadways are often littered with particles of decaying refuse of all kinds. Strict measures should be taken to stop this nuisance, which is caused not only by overloaded carts carrying manure from the stables in the city to the country, but also by the public scavenging carts.

Antivaccination in Ireland.

At the last Waterford City Sessions the guardians of the Waterford Union summoned six men for failing to comply with an order made by a magistrate under the Public Health Act, requiring each of them to have a child under 14 years of age vaccinated within six months from July 26th, 1911. Each of the defendants was fined one penny and costs. At a recent meeting of the Athy Guardians a resolution was adopted declining in future to prosecute parents for failing to have their children vaccinated. Replying to this decision, the Local Government Board pointed out that the guardians were the body entrusted by the Legislature with the carrying out of the Vaccination Acts, and any slackness on their part in the discharge of their duties in the matter would expose the infant population to the risk of contracting small-pox and be a source of serious danger to the public health. The guardians decided to take no action in the matter.

Guardians and their Medical Officer's Illness.

An unusual case of the refusal of a board of guardians to accept a medical certificate has occurred in Galway. It appears that Dr. Kirwan, medical officer, has been ill, and was asked by the board of guardians to send a certificate, regarding his present state of health, by an independent man. Dr. Kirwan's son, who is doing duty for his father, sent a medical certificate with a letter saying that as there was no other medical man nearer than Galway, if the board would not accept his certificate they must send out a medical man at their own expense. After some discussion the board decided to refuse to recognize the certificate, and passed a resolution asking Dr. Kirwan, senior, to have himself at once examined by an independent medical man. If he declined to do so the guardians would charge him with the services of a locumtenent from the date of his illness.

Royal Medical Benevolent Fund of Ireland.

The annual meeting of the Belfast branch was held in the Medical Institute, Belfast, on May 17th. The President (Professor J. Symington) occupied the chair. Dr. Fielden, Honorary Treasurer, read the report, which showed a total subscription of £151 13s. The expenses amounted to £5 3s. 6d., so that they were enabled to send to the treasurer of the central fund in Dublin £146 5s. 6d.; this was £17 2s. 10d. less than last year. One subscriber wrote across the counterfoil of his receipt, "Will not subscribe again unless benefits in future confined to those who pay subscriptions." But Dr. Fielden pointed out this society was in its essence a charitable one, not an insurance association; it was to help the widows and orphans of medical men who had died without means, and a few medical men themselves who had fallen wounded in life's battle. It was to be hoped that this subscriber would not only continue his subscription, but increase it, and induce others to join. It was not for medical men to form a court-martial to ascertain whether a medical brother had been his own or his family's worst enemy; it was to render "first aid." The President moved, and Dr. J. Walton Browne seconded, the adoption of the report, which was passed unanimously. The President and Council were then elected. It was noted with satisfaction that, although £146 had been sent to Dublin, the claims arising in the Belfast branch amounted only to £95, so that a substantial sum was contributed for the benefit of other parts of Ireland.

Doctors as Crown Witnesses.

The question of the payment of a medical officer's substitute when he is called to attend at court has again arisen. At a recent meeting of the Swinford Guardians it was unanimously resolved:

> That we ask the Local Government Board to amend the regulation in the dispensary rules which requires that a medical officer, if summoned as a Crown witness at assize or other courts, his substitute must be paid out of the rates. We consider it altogether unfair and unjustifiable that in such a case the ratepayers should be called upon to pay the substitute's remuneration, as they have nothing whatever to do with the absence of the medical officer, who receives substantial remuneration and expenses from the Crown for every day or night that he is absent. It is obvious that in these cases the substitute should in justice be paid by either the medical officer or the Crown.

Whatever may be said in justification of the plea that the Crown should pay the substitute, it is absurd to suggest that the medical officer should do so; he does not attend as a witness at or for his own pleasure; the subsistence allowances are inadequate and do not cover the out-of-pocket expenses; and the daily fee is small—in many cases only one guinea—and is only intended to compensate for the loss of private practice, and certainly does not include the payment of a substitute. If a dispensary medical officer were a whole-time officer, it would be a different matter, though even then, as his attendance at court is an extra duty, he might reasonably expect extra pay for it.

Belfast Ophthalmic Hospital.

The annual meeting of this institution was held on May 13th. The Earl of Shaftesbury, president, occupied the chair. The annual report showed that the work of the hospital was being carried on with increasing vigour; the debt was less than last year. Dr. J. Walton Browne submitted the medical report. The statistics were rising, and an increase of £100 a year in the subscriptions would enable many further improvements to be completed. The work had been hampered by the absence through illness of Mr. Cecil Shaw; however, by the assistance of

Mr. H. H. B. Cunningham and Mr. Wyclif McCready, the care of the patients had been thoroughly carried out. They would all be glad to hear that Mr. Cecil Shaw was greatly improved in health and expected to return to full work in another month or so. The reports were passed and the new office-bearers elected. Lord Shaftesbury, in returning thanks to the meeting, said that they all knew of the skill of Dr. Walton Browne as an ophthalmic surgeon; he wondered, however, whether he could give his patients a "modern eye."

DR. P. MACARTHUR, GREY ABBEY, COUNTY DOWN.

After thirty-eight years' service as medical dispensary officer for Grey Abbey district, Dr. Macarthur has from failing health resigned his position. His resignation has been received with great regret by rich and poor, public boards and private patients; and the high appreciation of his services was expressed by a public dinner on May 1st in the Courthouse, Grey Abbey, and the presentation of a cheque for £325 and a beautifully illuminated address. Major-General Montgomery presided. The usual loyal toasts and that of "The Guest" of the evening were proposed, and Dr. Macarthur replied. The whole proceedings bore eloquent testimony to the position he holds in the hearts of the people, both for kindness, unselfishness, skill, and for his never-ending labours for others. The profession in Ulster joins heartily in the good wishes expressed so frequently that evening.

THE CORK MATERNITY.

On Thursday, May 9th, the City Hall, Cork, was crowded to hear a lecture by Dr. MacNaughton Jones, of London, on "Moore and his Melodies." The Lord Mayor of Cork and the High Sheriff of the City were on the platform to welcome Dr. MacNaughton Jones on behalf of the citizens. The lecturer, who is an old citizen of Cork City, a student of the late Queen's College, Cork, and for many years practised in the city, had travelled from London to give the above lecture to aid the funds of the Cork Maternity. The life of Moore was portrayed, readings from the great poet's melodies were given, and throughout the lecture was illustrated with lantern slides and songs to Irish airs, a selection from Irish bagpipes, together with some exhibitions of the four-handed reel. The Lord Mayor returned thanks to the lecturer, and Dr. MacNaughton Jones, in reply, said it was not an empty phrase when he said that he had come there with great pleasure to help the old institution in whose founding he was interested. Of the work that that institution had done with its slender funds, all felt proud. There was nothing spent on bricks and mortar and of the two things remarkable about it, one was its extremely small mortality. There was only one thing of which the lecturer always felt proud in his life, and that was his connexion with the origin of three institutions in Cork—the Eye, Ear and Throat Hospital, the Cork Maternity, and the Women and Children's Hospital. For the dear old Queen's College, to him the dearest spot on earth, he had always the liveliest affection. Cork people ought to be proud of the men that emanated from that college. They were to be met with in every part of the British Empire and had risen to the highest distinction in their profession.

Hong Kong.

[*FROM OUR CORRESPONDENT.*]

THE HONG KONG UNIVERSITY AND THE HONG KONG COLLEGE OF MEDICINE.

ON March 11th the ceremony of opening the Hong Kong University buildings took place, and a few days later there was signed an agreement handing over the College of Medicine to the University from September 1st, 1912, at which date the university will begin its first session.

The pioneer efforts that have led up to the foundation of a university for Hong Kong were begun and have been continued by a few enthusiastic medical men, and are so striking in their philanthropy and results that a short history of the college and description of its constitution cannot fail to be of interest.

History.

The Hong Kong College of Medicine had its inception at a meeting held on August 30th, 1887, in the then recently opened Alice Memorial Hospital, at which the following gentlemen were present: The late Rev. Dr. Chalmers (in the chair), the late Dr. William Young, Dr. (now Sir Patrick) Manson, Mr. Cantlie, Dr. (now Sir) Ho Kai, Dr. Jordan, Dr. Gerlach, and Mr. W. E. Crow. It was resolved to establish a College of Medicine for Chinese in Hong Kong, and Dr. Manson was forthwith appointed Dean. On October 1st, 1887, the inauguration took place. Five years later two men, Dr. Kong Ying Wa and Dr. Sun Yat Sen, the well-known reformer, obtained the licence of the college. For over eighteen years the college almost owed its existence to the indefatigable exertions of the secretary, Dr. Thompson, and to the enthusiasm he inspired in others. The college has turned out forty-six licentiates, many of whom are doing excellent work in China.

The government of the college is vested in a court of seven members—the Rector, the Dean, a representative of the General Council, a representative of the Alice Memorial and Nethersole Hospitals, the Rector's Assessor, and the Secretary. There is a General Council consisting of all persons holding office or appointment in the college, the licentiates of the college, and such benefactors of the college as may be nominated by the court. There is a Senate consisting of all the lecturers of the college—about twenty in number—and the Director of Studies. The Dean is Chairman of the Senate and official representative of that body in the court and at public functions. The successive deans since the opening of the college have been: Sir Patrick Manson, Mr. James Cantlie, and Dr. Francis Clark.

Until recently all the college lecturers gave their services entirely gratuitously. Now a nominal honorarium is paid to lecturers from the fees of the students, supplemented by an annual Government grant of $2,500 to the college, which was paid for the first time in 1902.

The original name of the institution was the Hong Kong College of Medicine for Chinese; but in 1907 the name was altered by the omission of the limiting phrase since students of other nationalities than Chinese study at the college. The curriculum is a five years one; the preliminary examination is recognized by the General Medical Council of the United Kingdom.

The college has had its head quarters in the Alice Memorial Hospital, and the Nethersole, Ho Miu Ling and Tung Wa Hospitals have also been open to students for purposes of clinical instruction; but, in addition, the college has borrowed accommodation for special purposes all over the city—for example, the surgery lectures have been delivered at the Government Civil Hospital, biology has been taught at Queen's College Laboratory, public health in the Royal Sanitary Institute's lecture hall and on the premises of the sanitary department, pathology and bacteriology at the public mortuary and Bacteriological Institute. A year or two ago a scheme for the erection of college buildings had reached the stage of the preparation of foundations but was abandoned when a larger scheme for the creation of a University of Hong Kong was promulgated. In 1905 the Government reserved a site in every way suitable for the purposes of a medical college, and offered it to the court free of all charges, and in 1907 a generous Chinese gentleman, Mr. Ng Li Hing, an old resident of the colony, was prepared to spend $50,000 in the erection of buildings on the site thus held in readiness. When, however, the late Hormusjee N. Mody, a Parsee gentleman, came forward with an offer to His Excellency the Governor, Sir F. J. D. Lugard, to erect a university for Hong Kong which should incorporate the existing Medical College, the court willingly consented to co-operate in the larger scheme, and Mr. Ng Li Hing transferred his gift to the University Endowment Fund.

The Hong Kong University.

Constitution.—The university was incorporated under local Ordinance, and came into existence on March 30th, 1911. It has recently incorporated the Hong Kong College of Medicine. The constitution of the university consists of a court composed of life, *ex officio*, and nominated members, numbering at present forty; of a council which will eventually consist of some seventeen members, partly

elected by the court, partly by the senate, and partly *ex officio;* and of a senate which will consist of the Principal and staff of the university and the Director of Education of the Colony. The creation of the Senate awaits the arrival of the Principal and staff. The Governor of the Colony is *ex officio* Chancellor. The Director of Public Works, the Director of Education, and the Registrar-General (Protector of Chinese) hold *ex officio* seats on the court and council, thereby identifying the local government with the university, securing their help and long local experience, and ensuring a continuity of policy. The Principal will be Vice-Chancellor and President of the Senate.

Objects.—The objects of the university as declared in the ordinance of incorporation are:

> The promotion of arts, science, and learning, the provision of higher education, the conferring of degrees, the development and formation of the character of students of all races, nationalities, and creeds, and the maintenance of the good understanding with the neighbouring Empire of China.

It is hoped that the Hong Kong University will be largely instrumental in making English the predominant *lingua franca* of the Far East, as pidgin English is already in business. Such a result would no doubt bring in its train important commercial benefits. English will be the medium of instruction. The necessity for this is that, although China has a written language common to the whole country, the spoken language is different in almost every province, and there would be men in almost every class who could not follow the instruction if it were given in any one Chinese dialect; moreover, few Europeans could lecture in a Chinese dialect, and students must learn a Western language, or be cut off for many years from almost all the scientific and medical literature of the West.

Buildings.—Sir Hormusjee Mody undertook to provide the buildings. These include the main buildings, a house for a married principal, and houses for two married professors or four unmarried professors. The main building is calculated to afford lecture-rooms, etc., for the accommodation of 500 undergraduates, and it is planned so as to be capable of extension. The chief feature is the great hall, 80 ft. by 50 ft., with domed roof, 43 ft. high. There are eleven class-rooms and eight laboratories and workshops, with libraries, a common room for students, committee rooms, offices, and coolies' quarters in basement. It is built on, perhaps, the finest site available for the purpose in the island, in the neighbourhood of the hospitals and mortuary, whose proximity is a necessity for instructional purposes for medical students. The site has been given by the Colonial Government, together with a large area immediately adjoining for residential quarters for students and a smaller area for the erection of an anatomical laboratory. Near the university is a site upon which the Church Missionary Society are building a hostel, and it is understood that on the adjoining site the Roman Catholic Mission will build their hostel, while immediately above it is an area acquired by the London Missionary Society for a similar purpose. The cost of the buildings and the preparation of the ground—which has been borne by Sir H. Mody, whose recent death has been an irreparable loss not only to the university, but to the colony—is approximately $345,000. The value of the sites given by the Government is estimated at $176,297. The cost of the anatomical theatre is estimated at $28,450. In addition to the missionary hostels, a residential block is being built by the university at a cost of $59,000; it will provide separate rooms or cubicles for about fifty students, with a large dining hall, quarters for a British professor and for a Chinese house-master.

Endowment. — The endowment and general fund, exclusive of the anatomical laboratory fund, amounts to about 1,429,000 Mexican dollars, collected as follows:

	$
Chinese subscriptions	751,179
British and others, in the East	144,650
British, at home (£870 13s. 0d.)	9,421
Promised by John Swire and Sons and allied firms, (£40,000)	457,143
Interest, etc., $68,464 (less $2,250 expenses)...	66,706
Total	$1,429,099

Of this sum $157,000 is hypothecated to scholarships. From it are also to be deducted the sums necessary for furnishing and equipment.

The Legislative Council of the Colony has voted a sum of £1,200 ($14,000) for the establishment of a Regius Professorship, and it is proposed that this shall be an annually recurrent vote. His Majesty's Government has promised an annual sum of £300 a year for scholarships, the holders of which our late King was graciously pleased to direct should be called "King Edward VII Scholars." Speaking in round figures, it may be anticipated that in 1913 the university will be possessed of an income of about £9,000 (or $100,000) per annum. With these funds it is proposed to open the University in September, 1912, with three faculties, Medicine, Engineering, and Arts, and if, as is trusted, further funds are rapidly forthcoming when once the university is opened, it is hoped to add other faculties without delay.

The appointed Principal of the University is Sir Charles Eliot, K.C.M.G., recently Vice-Chancellor of Sheffield University.

Special Correspondence.

PARIS.

Radical Cure of Varicocele.—Reduction of Blood Pressure by Application of X Rays to Suprarenals.—A New Cancer Cure.

AT a recent meeting of the French Military Society, M. Jacob described an operation for varicocele, designed to suspend the testicle from the external ring after extensive resection of the pampiniform plexus; the veins on the anterior surface of the cord especially were carefully removed, and care was taken that the vas deferens was in no way injured, and the artery supplying it carefully preserved. The lower stump of the resected plexus was then attached to the external ring by means of a circular suture, the peripheral end of which passed through the internal pillar, and the other extremity through the external pillar. By this method the stump became attached to the external ring, which was obliterated by the newly formed adhesions. M. Jacob stated that he was thoroughly satisfied with the results obtained.

It is known that *x* rays have an ameliorating effect in hypertrophy and hypersecretion of the thyroid gland, and an effect on the other secretory glands, and that when the blood pressure is high there is sometimes, if not frequently, hypersecretion by suprarenal glands. Drs. Zimmern and Cottenot in several cases have, by the use of *x* rays, reduced the systolic pressure by 30 to 40 mm. of mercury in cases of arterio-sclerosis. The fall of blood pressure was accompanied by marked improvement in the patient's general condition and remained constant for considerable periods.

Dr. Guezada has made a preparation of arseno-phospho-albumin with which he says he has treated several cases of cancer successfully. The preparation is applied locally and also administered internally. It is said to have the property of stopping haemorrhage from tumours and also suppuration in cancerous growths. In two cases the results were particularly favourable—namely, in a case of cancer of the neck and in another case of carcinoma of the face in a woman, aged 87. The matter is, however, still in the experimental stage.

THE De Dion Bouton one-cylinder 6-h.p. chassis is well known. The managing director informs us that the eight-cylindered cars, 1912, are now having a larger sale, and may be inspected at 10, Great Marlborough Street, London, W.

THE President of the International Hygiene Exhibition held last year in Dresden, His Excellency C. A. Lingner, has asked the Saxon Government to contribute 2,594,000 marks for the equipment of the National Museum of Hygiene, which is to be established in Dresden. The Government is prepared to give a million marks this year and a second million in the year 1914–15. The municipality of Dresden has announced its intention to give the site for the museum and an annual contribution of 150,000 marks for upkeep. We are not yet in a position to say what amount will be provided out of the profits of the exhibition, but in addition to the contribution of objects for exhibition the money available will certainly amount to a fairly large sum.

Correspondence.

GREEN URINE DUE TO A PROPRIETARY PILL.

SIR,—There can be no doubt that the majority of blue and green urines are due to the administration of methylene blue. Most people who pass these coloured urines are unaware that they have taken any drug. In some cases the methylene blue is administered surreptitiously as a practical joke, pink-coated sweets being sold for this very purpose. In other instances it is introduced into confectionery as a colouring agent. Although the great majority of green and blue urines are due to this drug, they must sometimes be produced by other agents, for cases of blue and green urine were recorded before the discovery of the aniline dyes. Indigo can hardly be regarded as a cause, for very large quantities may be taken without affecting the colour of the urine. Green urines may be due to biliverdin, easily recognized by its characteristic tests, but they are not common.

Methylene blue, which is tetramethyl-thionine-hydrochlorate, is given in doses of from 1 to 3 grains in chronic nephritis, cystitis, and gonorrhœa, and to patients suffering from *Bilharzia haematobia*. A quarter of a grain twice a day imparts a pea-green colour to the urine, whilst the same dose more frequently repeated turns it a peacock-blue. These urines keep well, undergoing decomposition slowly, but after a time they lose their colour, which, however, is speedily restored on shaking from the absorption of oxygen. The addition of a drop or two of formic aldehyde prevents decolorization almost indefinitely. A blue urine which had kept well for weeks became turbid and lost its colour, which was at once restored by filtration. Two months later, when every trace of the blue had again disappeared, withdrawing the cork and shaking for a few minutes produced at first an olive-green colour, then a sage-green, and finally a blue. These colours are not discharged or altered by exposure to *x* rays, nor by the action of a powerful Finsen light.

The chemical tests for methylene-blue urines are fairly characteristic, but those afforded by the spectroscope are still more reliable. Dilute solutions give a narrow dark band in the red and orange, whilst in strong solutions the whole of the red and orange, with parts of the yellow and green, are cut off. In methylene-blue urines these effects are always seen, but when the original urine has a marked yellow colour the violet and indigo are also darkened.

All this is ancient history, for Stockman of Glasgow in the *Edinburgh Medical Journal* of August, 1902, went thoroughly into the matter, whilst in June, 1906, in the same journal, Dr. Wilson Hake and I published an article on "Green, Blue, Magenta, and other Coloured Urines," illustrated with plates of spectra.—I am, etc.,

London, W., May 18th. WILLIAM MURRELL.

We have also received a letter from Dr. H. Wilson Hake, Lecturer on Chemistry and Toxicology at the Westminster Hospital Medical School, in the course of which, after giving the reference to the paper by himself and Dr. Murrell mentioned above, he desires to correct the statement made by Drs. Golla and Rolleston (BRITISH MEDICAL JOURNAL, May 11th, p. 1065) to the effect that the spectra of methylene blue and indigo are practically identical. Dr. Wilson Hake writes: "This is by no means the case if a careful observation is made. It will be seen from the absorption spectra which have been reproduced in the paper by Dr. Murrell and myself, that whereas methylene blue shows an absorption band in the red and orange on or near the C line, indigo shows an absorption band in the orange near to the D line. This difference may be easily observed by means of an ordinary good spectroscope."

SIR,—I was most interested by the communication by Drs. Golla and Rolleston in the JOURNAL of May 11th, as the following case was under my observation at the time I read it:

On Monday, May 6th, I was consulted by a police constable who complained of pain in the head and back of the neck. His temperature was slightly above normal, and I thought he was suffering from influenza. He told me the urine he had passed that day was green in colour. I advised him to go home and keep to his bed for a day or two. He was seen by a neighbour to be at his house in the early part of the evening, but when his wife returned home later on he had gone out, and did not return that night or next day. It was not till the afternoon of Wednesday, May 8th, that he turned up, and I was called to see him in the evening. He then declared that he remembered nothing that had happened from Monday evening till Wednesday afternoon, when he found himself walking towards Huddersfield about three miles from his home. He was still complaining of pain in his head, and I was shown a specimen of his urine which he had passed after returning home. It was still bright green in colour. It remained so until the following day. On questioning him I found he had taken a pill at Bradford on the previous Sunday, as he thought it might do him good for a cold he had. He sent for the box, and I found the pills to be "De Witt's Kidney and Bladder Pills."

An interesting point in this case is the length of time the urine retained its green colour after taking only one pill: it lasted nearly four days. It is impossible to say whether the pill taken on Sunday had anything to do with his loss of memory on the Monday. My patient is an intelligent young man, and I have no reason to doubt his word that he recollected nothing between Monday evening and Wednesday afternoon. From the condition of his clothing when he came to himself he thinks he must have slept out of doors.—I am etc.,

Huddersfield, May 19th. JOHN IRVING, M.B.

SIR,—I have seen five patients during the past few weeks passing green urine, all of whom had taken the pills referred to in previous letters.—I am, etc.,

R. SEAVER DOLLARD, L.R.C.P.Edin., L.S.A.

Catford, S.E., May 19th.

THE STERILIZATION OF THE UNFIT BY MEANS OF THE *X* RAYS.

SIR,—One of the greatest problems which confronts humanity is that of dealing with the ever-increasing number of insane persons, imbeciles, and idiots who are yearly added to our population. Whilst on the one hand there is a tendency for the total birth-rate to decrease, there can be little doubt that it is on the increase amongst the special individuals who it should be our endeavour to restrain. Our methods up to the present have been to nurture these undesirables, to build homes for them, to pay rates for their keep, and to generally keep them in a state of glorified imprisonment. Many of them are treated far better than are an infinitely large number of persons who do useful work in the world's progress. There can be no doubt that this problem is becoming a more pressing one every year, and sooner or later it will be an absolute necessity that it should be dealt with on scientific lines.

Had Nature her own way in the matter, there can be little doubt that she would make short work of these useless individuals by removing from them the artificial atmosphere with which we surround them, and which conduces to their multiplication rather than their decrease.

Notwithstanding the great efforts which are being made in the better education and better housing of the poor, little effect has been so far produced in lessening the number of undesirables which are yearly added to our list. At the present time we have something like 132,000 insane persons in asylums, who are absolutely useless beings, at an average cost of about 14s. 6d. a head a week, a payment which has to come out of the pocket of the rate-payer. To this number we must add the habitual drunkards, idiots, harmless imbeciles, and criminals who are largely kept in the same manner. The cost involved in keeping these useless individuals entails a tremendous strain upon the public purse; moreover, as when outside the asylum walls they are allowed to marry and bring forth children, the cost is an ever-increasing one. According to the census of 1901 there were 18,900 known married or widowed idiots, imbeciles, and feeble-minded people in the United Kingdom and Ireland; and although many of these are unfit for either citizenship or society, it must not be forgotten that they yet remain physically fit to beget children. To those who take any interest in the progress of the race, the question of a remedy for this unfortunate state of things must occasionally occur. The question arises, Is there a remedy for this? Several remedies have been suggested, but I think the balance lies

in favour of making the unfit unfitted for parenthood in a manner which can produce no harmful results.

Experimental investigation has taught us that in the *x* rays we have an agent which can bring about such changes in the sexual organs that complete sterilization results, and in animals this can be done without producing any ill results, or at any rate, any effects which have so far been noticed. In dealing with males, the procedure is an exceedingly easy one; with females, however, it is more difficult, owing to the amount of tissues through which the rays have to pass, and the danger of producing dermatitis. It is not necessary here to enter into the technique of the procedure, but there can be little doubt that complete sterilization can be obtained with comparative ease.

The chief point about this method to which I particularly wish to draw attention is that whilst it produces sterilization it does not produce impotency; this may possibly be an argument against its use, as there may be some who would be willing to submit themselves to the rays in order to save their purses and themselves from some of the disadvantages of parenthood; but on the other hand, the operation could be so guarded by legislative procedure, that no harm in this respect would arise, and even if it occasionally did, no doubt the good results achieved would more than counterbalance the evil which exists to-day.

It was on account of the sterilization properties in the *x* rays that, some four or five years back, I brought the matter before the council of the then British Electro-Therapeutic Society for the purpose of obtaining the resolution in which it should be set forth that the *x* rays should only be used by medical men, and should only be used by them after their having passed an examination to show their efficiency in dealing with them. On the advice of the committee, I wrote a number of letters to all the then medical members of Parliament; and whilst they almost all agreed that some legislative procedure was necessary, they expressed the opinion that the first step should be taken by a large body, such as the British Medical Association, and afterwards referred to Parliament, if necessary as a private bill.

At the present time the *x* rays are only to a very slight extent used by quacks, for the simple reason that they are so fraught with danger that they are afraid of them. There would be little difficulty in drawing up an Act for bringing about the sterilization of the unfit, and owing to the ease with which it could be done, to the painlessness of the operation, and to the fact that impotency does not result, we may assume that a large number of feeble-minded persons, who are sufficiently sane to be alive to the necessity, would be only too willing to submit themselves for the public good; for the others who are beyond this we need have no consideration.

The matter is of such great and increasing importance that it is well that we should consider it from all its standpoints, and at the present time, when a bill has been brought into Parliament for the restraint and care of the mentally defective, it has a special importance, and is, perhaps, of even greater importance than the imposing of penalties in the case of marriage with defectives.—I am, etc.,

J. HALL-EDWARDS, L.R.C.P., F.R.C.S.Edin.,
Senior Officer in Charge of the *X*-ray Department,
May 20th. General Hospital, Birmingham.

INTESTINAL STASIS AND RHEUMATOID ARTHRITIS.

SIR,—I have read with the greatest interest Mr. Arbuthnot Lane's stimulating and suggestive lecture on intestinal stasis which appeared in your issue of May 4th. His recommendation "in every case of rheumatoid arthritis in which simple means have failed the bowel should be short-circuited without hesitation" leads me to write a word of caution based on practical experience of this operation.

In November last I was consulted by a young lady suffering from severe rheumatoid arthritis of ten years' duration, the condition being slowly progressive. There were no subjective symptoms of gastro-intestinal disorder, but the frequently repeated examination of the stools revealed an advanced degree of putrefaction in the bowel. The rapidity with which foul-smelling faeculent fluid was secreted immediately after irrigation of the bowel was a very striking feature. Microscopic examination of this faecal matter showed it to be composed entirely of bacteria. Medical treatment by means of various diets, drugs, and lavage, carried out for over two months, failed to effect any relief of the symptoms or to improve the intestinal evacuations, and it then appeared to me that benefit might follow surgical treatment, and more especially irrigation of the large bowel. I was then unaware that any surgical measures had been advocated by Mr. Lane for the relief of this condition, and I asked Mr. Alexis Thomson to see the patient with me with a view to operation. After deliberation, the operation of short-circuiting suggested by Mr. Lane for other conditions was decided on and successfully performed, the patient making a rapid and satisfactory recovery from the operation. I regret to say, however, that there has been no improvement in the rheumatoid condition; on the contrary, the joints are now much more painful and the movement less free than before the operation.

My object in writing is to raise the question of the soundness of the scientific basis of this particular operation. Is it wise to leave a few feet of diseased and septic mucous membrane on the chance that recovery will take place naturally under the influence of the rest, in a surgical sense, undoubtedly afforded by the operation? Mr. Lane has done valuable service in calling fresh attention to the profound importance of intestinal autointoxication or infection as a cause of rheumatoid arthritis. When the truth of this is more widely appreciated, adequate attention will be directed to the systematic investigation of the intestinal functions, and appropriate treatment will be applied which will cure or arrest the disease at its onset, so that the question of appropriate surgical treatment will never arise.—I am, etc.,

Edinburgh, May 12th. CHALMERS WATSON, M.D.

NATIONAL MEDICAL UNION.

SIR,—Dr. Helme's letter under the above heading in your last issue appears too soon after the selection of candidates for the Lancashire and Cheshire Branch for any one to doubt that the one has a direct bearing on the other.

We are not responsible for the unfortunate statements and headings which have appeared in the lay press, and to which Dr. Helme alludes. These statements were challenged by us in the following issue of the paper, which was published on the morning of the day upon which he addressed his letter to you. The article in question was inspired by some person of whom we have no knowledge whatever, and we can only suppose that its purpose originated in a feeling of enmity towards the National Medical Union.

The Union has never accentuated differences in the profession. Testimony of this is to hand from members of Council, leaders of the profession, and members of the rank and file of the Association from one end of Great Britain to the other. An occasional difference as to the best means to secure an end, an honest expression of opinion on a controversial point, is not disunion, is not an attempt to wreck a policy, neither is it the folly which Dr. Helme suggests.

At the last general meeting of the National Medical Union the executive and general committees were authorized, by resolution, to deal with the British Medical Association Council elections, and Dr. Reynolds and Dr. O'Sullivan were finally decided upon by these committees as being the most suitable candidates. Dr. O'Sullivan was nominated at the unanimous wish of the members of the National Medical Union in Liverpool. The nominations were subsequently confirmed, by an overwhelming majority, at an open meeting of the profession of Liverpool and district. It is hoped that the National Medical Union will have accomplished most of its labours when the results of the British Medical Association Council elections are announced.

We believe Dr. Helme has accepted nomination for the Central Council election. If this is so, we would draw his attention to the fact that, by opposing the return to office of the present members of Council for this Branch, he is

actually doing the very thing for which he blames the National Medical Union.—We are, etc.,

G. A. Wright,
Chairman.
T. Wheeler Hart,
J. Skardon Prowse,
Manchester, May 21st. Honorary Secretaries.

[We have received the following telegram as we go to press: The National Medical Union entirely repudiate the series of misstatements contained in the election address of Dr. Heaney, of Liverpool, for which there is not the slightest foundation.—Signed, T. Wheeler Hart and J. Skardon Prowse, Honorary Secretaries.]

Sir,—Dr. Helme's letter, published in the Journal of May 18th, referring to the above organization, is just sufficient to excite curiosity as to the nature of the reasons which, he informs the readers of the Journal, he proposes to give more fully in a subsequent issue.

In his communication he alludes to a policy of attempting to accentuate differences in the profession, but gives no information as to the grounds upon which he bases this allegation against the Union.

It may not have suited Dr. Helme at this juncture to have disclosed that particular information, but it would seem more in accordance with the elementary principles of equity which should be extended to those against whom his charge is directed, if he had, in the first instance, given a detailed account of the circumstances upon which the accusation was based ere he exhibited a desire to produce an effect by primarily levelling the charge with the promise to later substantiate it by his proofs. A wide publicity has been given to the charge, and minds may be prejudiced before the grounds upon which it is formulated are forthcoming and accorded equal publicity.

Dr. Helme girds at the Chairman and Secretaries of the National Medical Union for issuing what he styles a "manifesto" without submitting it to the Union. It would be instructive to learn what are his views as to the functions of executive officials when they are confronted with statements in the daily press vilifying and traducing the body to which they are attached. Are they, as he implies, to summon a meeting of the whole union and lose valuable time before publishing a denial of the statement made? Dr. Helme observes that the Union was formed with the avowed intention of uniting the rank and file and strengthening the hands of the members of the British Medical Association. I would suggest to him that for "hands" he might more accurately have written "head" or "Council"; the hands were already clean and strong; the head not always clear, vigorous, and firm in purpose and execution; hence the real origin of the National Medical Union.

I would like to remind your readers that the objects of the Union were distinctly set forth in the Supplement of the British Medical Journal of May 4th, and I unhesitatingly say that not a member of the British Medical Association could legitimately and with truth assert that they tend in the slightest degree to impair the unity and strength of the Association and the profession as a whole, but, on the contrary, they make for much unity and strength, and are deserving of commendation.

The *volte face* on the part of Dr. Helme is much to be deplored and regretted. It is likewise peculiar, as he was apparently one of the staunchest adherents of the Union until quite recently. His resignation has awakened conflicting and mixed feelings. He certainly was at one with its policy as to the opposition to be offered to the present members on the Central Council representing Lancashire and Cheshire—Messrs. Garstang, Taylor, and Larkin.

He can scarcely controvert the fact that the Union really owes its inception to a desire that, while remaining perfectly loyal to the Association, it should avowedly and determinedly seek to stiffen and strengthen an expedient and temporizing Council, and endeavour to alter its personnel.

Dr. Helme is reported, in a Manchester paper, to have stated that the National Medical Union is in the hands of a small number of men who have nominated two candidates for election to the Council of the British Medical Association, but have not submitted them to the Union, and that such action is not representative of the Union.

My reply to that statement is that I was proposed as a candidate, to my surprise, at a meeting of members of the National Medical Union (mainly members of the British Medical Association) resident in Liverpool and district, and the executive of the Union had nothing whatever to do with my nomination, but accepted it as coming from the Liverpool branch of the Union.

I subsequently, at a mass meeting of the profession held at Hope Hall, Liverpool, was proposed, in conjunction with Dr. Reynolds of Manchester, as a candidate for election to the Central Council to represent the Lancashire and Cheshire Branch, and received practically the unanimous support of the 200 men present.

I only missed being nominated by the Liverpool Division of the British Medical Association, of which Division I am one of the Representatives elected to take office in July, by four votes, and that was due to the intrigues of a clique who resent any member being elected to office unless he stands for election under their auspices and has received the stamp of their imprimatur.

The fact that in my address to the electors of the Lancashire and Cheshire Branch I have emphatically stated that the bed-rock of my candidature is loyalty to the British Medical Association as such, constitutes my answer to those interested individuals who at a critical time are engaged in impeaching the National Medical Union and endeavouring to impair and discount the efforts it has made to strengthen and unite the Association and the profession as a whole while struggling to insist that our just rights and demands shall be conceded.

In conclusion, let me make some slight reference to the letter of Dr. Staveley Dick, who has favoured Dr. Reynolds and myself to some criticism of our addresses. He asks himself what we have done in the past to justify our appearance as candidates. My reply is that Dr. Dick can scarcely have perused history to advantage when he does not bear in mind the fact that during periods of crisis men, who under ordinary circumstances are content to pursue their avocations and confine their energies to such, deem it imperative upon them to enter the arena on behalf of what they may consider to be a just and righteous cause. In particular are they stimulated to do so if they feel that there has been any treachery displayed by those to whom the leadership and conduct of affairs had been entrusted.

I trust that will be sufficient explanation to satisfy the susceptibilities of Dr. Dick for our appearance in the field.—I am, etc.,

Liverpool, May 20th. J. E. O'Sullivan.

APPENDICITIS—AND QUICKNESS.

Sir,—Mr. Paterson's vigorous criticism of the waiting policy in appendicitis only expresses, I am sure, the opinion of the great majority of experienced surgeons. Whatever may be the value of "wait and see" as a political aphorism, it is a most dangerous guide in the surgery of the appendix. The fruits of this policy, still too largely popular, are seen in the 1,500 annual deaths from appendicitis in England and Wales to which Mr. Paterson calls attention. If this number represented a death-rate of 5 per cent. of the total cases, the latter would equal 30,000 cases a year. I have no means of estimating the actual total of cases of appendicitis per annum, but it may well be less than 30,000, in which case the death-rate would exceed 5 per cent. Now, the death-rate of cases operated on within twenty-four hours of the onset of the acute attack certainly does not exceed 1 per cent. Mr. Paterson is certainly right, therefore, in saying that the great majority of the 1,500 annual deaths are preventable.

Although preventable, they will not be prevented until the profession and the public alike recognize the dangers of procrastination. During the last few years it is the experience of hospital surgeons in all parts of the country that cases of appendicitis reach them at a much earlier stage of the disease than formerly, and that their results have correspondingly improved. I look forward with confidence to see within a few years the mortality of appendicitis reduced to 1 per cent., or even less, when the dangers of conservatism have been fully grasped by all classes of the population, and when every surgeon frankly recognizes that the only safe treatment for every case of acute appendicitis is immediate operation.

In addition to the great reduction of mortality to which we can look from the universal practice of immediate operation, we shall obtain a great shortening of the time of illness and of convalescence. In many cases operated on within twenty-four hours it is possible to dispense with drainage, or to remove the tube at the end of twenty-four hours. Cases, on the other hand, in which operation has been delayed till the third day or later have to undergo the inconveniences and dangers of suppuration for at least three weeks, and often twice or three times that time.

I believe that on the advantage of operating within the first twenty-four hours of the acute onset there is little difference of opinion among operating surgeons. Those who still doubt the universal applicability of the rule to operate at once in all stages of the illness are influenced by their experience of unfavourable results which they have seen or experienced in cases operated on at times between the second and the fourth day of the disease, before, as they say, the disease had become "properly localized." They have attributed the fatal result to the disturbance of imperfect adhesions and to the opening up of new tracts of absorption for the toxins. I believe the explanation is erroneous. I have proved in some hundreds of cases that the mere separation of adhesions between a purulent focus and the unaffected peritoneum has no ill result. On the contrary, it often ensures the effectual evacuation of loculi of pus which otherwise would escape observation. The real protection of the peritoneum against spreading of the infective process is not merely the wall of lymph by which the local focus is walled off, but the state of relative systemic immunity of which the formation of the pus is evidence.

The real cause of the fatal results in the period intermediate between the onset and the formation of local pus which I have, like others, experienced is, I believe, nothing but the use of chloroform and the special tendency of this anaesthetic to be followed by acid intoxication in cases of abdominal sepsis. Since I abandoned chloroform in all cases of acute appendicitis and employed ether by the open method I have found no ill results from operating on any stage of acute appendicitis. I think the employment of this anaesthetic will remove the only doubt which some surgeons still entertain as to the expediency of operating on all cases as soon as they are seen, whatever the stage of the disease. But the ideal course, the safest, best, and simplest, is to operate in all cases within twenty-four hours. To that we shall eventually come, and in that course alone shall we find the means of bringing the mortality of appendicitis down to its possible limit.—I am, etc.,

Wolverhampton, May 20th. EDWARD DEANESLY.

PREVENTION OF CHILD MORTALITY: OVERLAPPING OF EFFORT.

SIR,—We are informed by a circular issued last week from Glasgow, that a proposal is on foot to form a National Association for the Prevention of Infant Mortality and the Promotion of the Welfare of Children under School Age.

We desire to call attention to the fact that a national organization of this description is already at work. This body is a special department, known as the Association of Infant Consultations and Schools for Mothers, of the National League for Physical Education and Improvement. The work which has been carried out by the League since its formation in 1905 includes: (1) The co-ordination and extension of already existing health promoting agencies, and the formation of others where none exist; and (2) the promotion of fresh legislation where necessary.

Since its constitution in December, 1911, the special department of the league concerned with child welfare has been at work on lines to a great extent identical with those set forth in the circular already referred to. It has secured the affiliation of fifty societies in all parts of the kingdom, comprising voluntary associations, municipal infant consultation centres, and schools for mothers, and other institutions for promoting the welfare of mothers and infants, and of young children generally up to compulsory school age. It is, further, in close touch and constant communication with the rest of these societies. The general and executive committees, on which the medical profession is largely represented, are on a purely democratic basis, and the members are all active workers on the various institutions they represent.

Already a considerable amount of useful practical work has been done. A great deal of literature (such as case-papers, weight charts, health leaflets, health posters, etc.) has been prepared by experts, and published at a cheap rate for the use of those who are engaged in this work; statistics have been collected and information, advice, and help have been given in starting societies all over the country. One exhibition illustrative of this admirable welfare work has been held, and another is in course of preparation; and, finally, owing to the propagandist efforts of the league, the number of local health societies has been doubled within the last year.

Duplication of effort and overlapping are to be deprecated. It is greatly to be hoped that before this new association comes into being, steps may be taken to ensure that there be no loss of energy or power, through preventable overlapping, in dealing with a question of such vital importance to the well-being of the whole nation.—We are, etc.,

W. BOYD CARPENTER.
LAUDER BRUNTON.
London, W.C., May 21st. JOHN TWEEDY.

THE DUTY TO SERVE ON LOCAL PUBLIC BODIES.

SIR,—May I appeal through the widely-read columns of the BRITISH MEDICAL JOURNAL to the leisured members of our profession to become members of district councils, boards of guardians, and magistrates, and so look after the interests of those members of the same profession who have to act as public servants? There must be many retired men who can spare the time to serve in these capacities, and by so doing can protect the hard-worked and much-criticized servants of these bodies. The profession is now arousing from its long sleep. Never was there a time when so much protection was required.

I trust these lines may be read by some doctors who have sufficient *esprit de corps* to respond to this appeal.—I am, etc.,

Acton, W., May 20th. CHARLES DIXSON, M.D.

FUTURE OF GENERAL PRACTICE.

SIR,—I am glad Dr. Cook agrees with me as to certain grave dangers to the general practitioner foreshadowed in the Interim Tuberculosis Report. He adds, however:

> As to charging fees over a long illness, are we not by taking up this position saying "Your money and your life"? for we know we shall not cure the man.

He then expresses astonishment at my taking up such a position. I must express my surprise at any one taking up so foolish a position. Dr. Cook is quite welcome to put up as many dummies as he likes, and may have all the credit he desires in knocking them down; but I think I am justified in protesting against being identified with any of them. What I did suggest was that in many cases of hopeless disease the patient would reap as much benefit from the services of his own doctor as from the treatment of a State official, and that in my opinion there was no necessity on the ground of public welfare for depriving him of the fees he might gain thereby. My suggestion is, of course, limited to the case of such patients as can be reasonably considered able to pay a doctor, and where proper precautions can be taken to protect others.—I am, etc.,

London, N.E., May 18th. MAJOR GREENWOOD.

FEES FOR EXAMINING FOR INSURANCE COMPANIES.

SIR,—A short time ago I was asked by a patient to examine him for life insurance in a company called the Sceptre Life Assurance, Limited. The sum was for £250. For the examination, which was a very full one, I naturally expected the reasonable fee of £1 1s., but after I had completed the examination and filled in the form I noticed at the very end of the form a statement that the fee for medical examination in cases of insurance for £100 to £500 is 10s. 6d., which the patient pays, but gets refunded from the company. The patient himself was

dissatisfied at paying me only 10s. 6d., and said he would approach the company about it, but simply with the result that the company's secretary wrote me stating that the amount of the medical fee was stated on the medical form. This is true, and no doubt I should have read over the whole form before filling it up. Had I done this I would have refused to examine the candidate under the reasonable fee of £1 1s. I was asked some time ago by the North British and Mercantile to examine a man for 10s. 6d. (I think the insurance was for £200). This I refused to do. I heard afterwards that the company had got the man medically examined by their medical adviser at their chief office in London. I know this is an old grievance of medical men, but it is high time we acted as a body in the matter by refusing to examine candidates for insurance where the sum assured is £100 or over for less than £1 1s.—I am, etc.,

Sidcup, May 17th. T. M. Callender, M.D., F.R.C.S.E.

Universities and Colleges.

CONGRESS OF THE UNIVERSITIES OF THE EMPIRE.

This congress will be opened on Tuesday morning, July 2nd, by the Earl of Rosebery, Chancellor of the Universities of London and Glasgow and Lord Rector of the University of St. Andrews. Two subjects will then be discussed—the division of work and specialization among universities, introduced by Sir Alfred Hopkinson, Vice-Chancellor of the Victoria University, Manchester; and inter-university arrangements for post-graduate and research students, introduced by Principal Peterson, McGill University, Montreal. Afterwards the delegates will be entertained at lunch by His Majesty's Government, and Prince Arthur of Connaught will hold a reception at the University of London in the evening.

On Wednesday morning Earl Curzon, Chancellor of the University of Oxford, will preside, and the subjects for discussion will be the relation of universities to technical education and to education for the public services, introduced by Professor A. Smithells, University of Leeds, and Mr. Stanley Leathes, C.B., First Civil Service Commissioner; and the interchange of university teachers, introduced by Dr. J. W. Barrett, University of Melbourne. In the afternoon Mr. Balfour will preside, when Sir Frederick Lugard, late Governor of Hong Kong and Chancellor of the University of Hong Kong, and Dr. J. C. R. Ewing, Vice-Chancellor of the Punjab University, will open a discussion on the problem of universities in the East in regard to their influence on character and moral ideals. This will be followed by a paper by Mr. E. B. Sargant, member of the Royal Commission on University Education in London, on residential facilities in connexion with universities.

On Thursday morning Lord Rayleigh, Chancellor of the University of Cambridge, will preside over a discussion on mutual recognition by universities of entrance tests, introduced by Mr. P. E. Matheson, Oxford Secretary of the Oxford and Cambridge Schools Examination Board; and on the action of universities in relation to the after-career of students, introduced by Mr. H. A. Roberts, Secretary of the Cambridge Appointments Board, and Miss M. G. Spencer, Secretary of the Central Bureau for the Employment of Women. In the afternoon Lord Haldane, Chancellor of the University of Bristol, will preside over a discussion introduced by Mr. J. A. R. Marriott, Secretary of the Oxford Extension Delegacy, and the Rev. D. H. S. Cranage, Secretary of the Cambridge University Extension Syndicate, on university extension and specialized classes for students engaged in professional, commercial, and industrial pursuits.

On Friday morning Lord Strathcona, Chancellor of the Universities of Aberdeen and McGill, will preside, and papers will be read by Dr. J. R. Parkin, C.M.G., Organizing Secretary of the Rhodes Scholarship Trust, on the establishment of a central bureau; by Miss H. M. White, Principal of Alexandra College, Dublin, on the position of women in universities; and by Sir James Donaldson, Vice-Chancellor and Principal of the University of St. Andrews, on representation of teachers and graduates on the governing body of a university.

UNIVERSITY OF LIVERPOOL.

The freedom of the City of Dublin has been conferred upon Professor Meyer as a recognition of his services in the cause of Celtic studies.

The council of the university has founded a Chair of Civic Design, and appointed to it Mr. G. D. Adshead. The funds for this chair have been provided by Sir William Lever.

The Ravenhead Sanitary Pipe and Brick Company has established an Entrance Scholarship in Architecture of the value of £30, tenable by students of the School of Architecture for two years. The successful candidate is to take the two years' course for the certificate in architecture.

The installation of a wireless telegraphy station at the university is now complete, and messages are being received daily from the Eiffel Tower in Paris and a very wide area. The detailed programme of lectures in the School of Social Science has been issued, and can be obtained at the university. The school is doing excellent work.

Further progress has been made towards the erection of the new Arts Buildings, and in the course of the next few months building operations will commence.

Dr. Alfred Holt has been appointed Reader in Physical Chemistry in the university. The Readership is an honorary post, and has been created by the council in appreciation of Dr. Holt's distinction in this subject.

The trustees of the Albert Kahn Travelling Fellowship have appointed Mr. R. W. Roxby, Lecturer in Geography in the university, to one of the two Fellowships offered each year to members of the staffs of the universities of the country. Each Fellowship is of the value of £660, and the Fellow has to travel for a year and to present a report to the trustees at the end of his tenure of the Fellowship. The appointment of Mr. Roxby is a welcome distinction.

Professor Petsch, successor to Dr. Kuno Meyer to the Chair of German, will deliver his public inaugural address about the middle of October next.

On Saturday, May 18th, Viscount Haldane opened the Harrison-Hughes laboratories for engineering. There was a large and influential gathering at the university to greet him. The Chancellor, Lord Derby, presided over the meeting. Mr. Heath Harrison, as the representative of the donors of the laboratories, formally presented the building to the Chancellor, and also handed to him a gold key, with which Lord Haldane subsequently opened the door of the building. Lord Haldane addressed the audience, and made happy comparisons between the purport of school teaching and university training and development in research.

UNIVERSITY OF MANCHESTER.

Annual Statement by the Vice-Chancellor.

At a meeting of the Court of the University of Manchester held on May 15th, the Vice-Chancellor, Sir Alfred Hopkinson, made his annual statement on the work of the university. He said that the number of students was now 1,644, a decrease as compared with last year. In all the Faculties except medicine the number of students had been practically constant, there being very little change in the last two or three years. That did not mean that the university had not grown, but there had been a tendency for several years to limit the classes of lower standard, and practically all the classes below the matriculation standard had disappeared, as the policy had been to induce people to attain that standard in the secondary schools which were the proper places for them. On the other hand, the amount of post-graduate and research work had largely increased.

The number of students in the Faculty of Medicine had declined. This was due to causes in operation throughout the whole country. In 1893 the number of students registered by the General Medical Council in England was 1,007 whereas in 1911 it was only 521, the drop having been almost continuous in the intervening years. There had also been a decrease of medical students in Scotland, though not in the same proportion as in England. Without discussing the general causes of this decrease, he would point out that the medical course, both in the character of the study and the number of years required for the course, was very arduous, and men might well ask what remuneration could be expected. There had been a growth in the number of official appointments, and it was possible that in a year or two this might result in an increase in the number of medical students in the country generally, and Manchester might expect to be affected accordingly, though the number of students in any particular medical school might be lessened owing to the increase in the number of licensing bodies. The movement for securing that the preliminary training of medical students in science should be given not at the universities but in the secondary schools was opposed by the Scottish and by some of the English universities, and should be regarded with some mistrust. He thought that the right policy should be to avoid too much specialization of boys of school age, as a wide training was necessary to maintain the liberal education of any profession. When the time came for the preliminary instruction necessary for the medical training it should be given within the university. The Manchester University had made some changes in its first M.B. course with a view to leading up more directly to the subsequent subjects of medical study without in any way interfering with the scientific character of the course.

Referring to the important matter of the Government grants, he was glad to say that the Government grants for universities and university colleges in England had been increased from £100,000 to £150,000; the grants were in future to be allotted by the Board of Education instead of the Treasury. The representatives of the university had met the representatives of the Board of Education, and it was agreed that it was quite impos-

sible for any outside body to have the determining voice as to the manner in which the grants should be expended. The grants would therefore be paid over to the general income, to be spent under the direction and at the discretion of the constituted authorities, on the understanding that they were for the doing of university work, and that work below the university standard would be ruled out. It was also understood that the grants were not to replace local subscriptions and support; if the people showed no willingness to support the university the Government said they would not be inclined to encourage it. Regard, too, would be paid to the amount of good work done by the university, and the amount of work which might be done more efficiently with more money.

The Vice-Chancellor made a sympathetic reference to the recent death of Professor J. Dixon Mann, who was the University Representative on the General Medical Council, and had always taken an active interest in the general education of medical students.

The Court then proceeded to the appointment of members of the Court and Council, and the following were elected: The Duke of Devonshire, Lord Sheffield, Colonel George Dixon, Mr. A. H. Worthington, and Mr. C. T. Needham, M.P. Mr. Edward Fiddes and Dr. Phoebe Sheavyn were also appointed to be members of the Senate, Dr. Sheavyn being the only woman member. A statute was then approved in the form sanctioned by the Privy Council for the institution of a joint matriculation board for the universities of Manchester, Liverpool, Leeds, and Sheffield. A scheme was also sanctioned for the granting of certificates in social work and a certificate in the teaching of art was instituted, the latter being a decentralizing movement which would throw the responsibility of granting certificates on Manchester rather than on South Kensington. An arrangement was approved by which Manchester students taking honours in French might spend one summer term at the Caen University, which would count for one term in the Manchester University. It was stated that there are now 47 students in the Faculty of Commerce, the maintainence of which required about £1,500 a year. Speaking of the Faculty of Public Health, Professor Delépine said it had turned out a large number of men who now occupied important positions; and the Vice-Chancellor said that nothing was more gratifying than the growth of this department. It was a source of great benefit to the public on account of the investigations which it carried out, and it had turned out a large body of efficient public health officers. The Manchester Corporation, in making its grant, suggested that a portion of it should be devoted to the public health work, and the Council of the University had gladly agreed to put £500 of the grant to this use.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The Fellowship.

THE following candidates have been approved at the examination indicated:

FIRST FELLOWSHIP.—H. G. Alexander, L. Bromley, E. H. P. Brunton, N. Cantlie, R. E. Collins, L. P. Costobadie, N. Duggan, A. T. Edwards, H. Flecker, H. Gardiner, R. N. Geach, H. D. Harrison, G. Ley, C. W. B. Littlejohn, R. C. McQueen, R. McRae, R. C. Ozanne, A. B. Pavey Smith, J. E. Pearce, H. Platt, W. A. Pocock, N. Purcell, A. A. Rees, G. B. Richardson, S. Ritson, D. C. Taylor, W. C. Toll, M. E. T. D. Vlasto, J. O. D. Wade, J. St.G. Wilson, M. S. Woolf.

CONJOINT BOARD IN IRELAND.

THE following candidates have been approved at the examination indicated:

D.P.H. (*Both Parts*).—E. G. S. Cane, *S. Child, H. V. A. Gatchell, J. F. Gibbons, R. Lewis, H. O'H. H. May, A. M. Watts.

* With honours.

Obituary.

PALEMON BEST, M.B.LOND., J.P.,

FORMERLY OF LOUTH, LINCOLNSHIRE.

MANY old medical friends of Dr. Palemon Best, some of whom were at University College with him fifty years ago, will hear with regret of his death. His health had been failing for some years; of late, attacks of angina pectoris became increasingly frequent, and on Tuesday, May 7th, he succumbed suddenly to a severe attack of cardiac dyspnoea.

Palemon Best was born at St. Ives, Cornwall (a district for which he always retained a deep affection), in 1839. He received his medical education at University College, London, where he had a brilliant career as a student, and was a favourite pupil of the late Sir William Jenner. He took the diplomas of M.R.C.S. and L.S.A. in 1861 and gained the gold medal for his year in Medicine at University College, London. In 1864 he took the degree of M.B.Lond., coming out first in Medicine, thus winning the gold medal and a scholarship of £100.

Although advised by Sir William Jenner to settle in London, he decided, for family reasons, to practise in his native town. On the death of his parents after a few years he settled in medical practice in Louth, Lincolnshire, where he remained until within a few years of his death. He soon gained success in general practice, and with characteristic zeal and energy identified himself with the life of the town, taking a prominent part in municipal and political matters and in philanthropic and educational questions. He was at one time mayor of the borough, a governor of the local King Edward VII Grammar School, and a justice of the peace.

Dr. Best was a keen and reliable diagnostician, and was resourceful and thorough in treatment. His opinion was highly valued in consultation in the neighbouring district. His mind was of the encyclopaedic order, and there were few subjects in which he was not interested. His advice was frequently sought on questions of general and medical education, and several men who have attained to high positions in the medical profession owe not a little to his counsel and help. He was a man with strong convictions and a great hatred of injustice, but with perhaps less power of seeing both sides of a question than others with the same intellectual power; sometimes, therefore, he found himself at variance with those with whom he would gladly have agreed. He was ever ready to lend a helping hand to those in distress or difficulty.

He leaves one son, Dr. W. Jenner Best, of Louth, Lincolnshire, and a daughter, Mrs. F. W. Dyson, wife of the Astronomer Royal for England.

J. E. SIMPSON, M.B., R.U.I.,

ASSISTANT SURGEON TO THE "TITANIC."

THE news of the disaster to the *Titanic* caused the many friends of Dr. Simpson, Assistant Surgeon on the ill-fated ship, a period of acute suspense; but from the first few entertained much hope, as they knew he would do his duty to others. The following letter has been received by Dr. Simpson's father, Dr. J. Simpson, of Belfast. It is written by Mr. C. H. Lightoller, second officer of the *Titanic*, to Mr. R. W. Graham, of New York:

Dear Sir,—In reply to yours of April 30th, I am sorry to say that Assistant Surgeon John E. Simpson was on the *Titanic*. I deeply regret your loss, which is also mine. I may say I was practically the last man to speak to Dr. Simpson, and on this occasion he was walking along the boat deck in company with Messrs. M'Elroy and Barker, Dr. O'Loughlin, and four assistant pursers. They were all perfectly calm in the knowledge that they had done their duty, and were still assisting by showing a calm and cool exterior to the passengers. Each one individually came up to me and shook hands. We merely exchanged the words, "Good-bye, old man!" This occurred shortly before the end, and I am not aware that he was seen by any one after. With deepest sympathy for you in the loss of your friend, believe me,

Yours sincerely,
C. H. LIGHTOLLER.

The late Dr. Simpson was a student in the Medical Faculty in Belfast, and received the M.B. of the Royal University in 1903. He practised for a time in England, but his health failed and it was considered advisable for him to rest for a time. Great sympathy is felt for his father, who is one of the best-known practitioners in Belfast, and for his family.

WE regret to record the death of Dr. DANIEL CATLIN BURLINGHAM, of Hawarden, Flintshire, on May 12th. It occurred at Chester, where Dr. Burlingham took up his residence only about a month ago on his retirement from practice. His death was due to an illness which commenced last November. Dr. Burlingham, a Norfolk man by birth, received his professional education at Edinburgh, where he became M.B., C.M. in 1876. He proceeded to the M.D. some three years later, and meantime had established himself at Hawarden on the invitation of Mrs. Gladstone, who had met him on the occasion of a visit paid by her to the North-East London Hospital for Children, where Dr. Burlingham was then house-surgeon. His connexion with Hawarden thus commenced remained uninterrupted until the date of his retirement. He played an active part in the life of the place, and his abilities and personal qualities made him a favourite with all classes of society. His retirement, not less than its cause, was much regretted, and the feeling of the inhabitants towards him expressed by the presentation to him of a large cheque.

Its acknowledgement was one of the last letters he wrote to Hawarden before his final illness at Chester. By birth Dr. Burlingham belonged to the Quakers, and he received part of his education at their school in York; he joined the Church of England in 1896, and for many years acted as a sidesman in Hawarden Parish Church. A few years earlier he also joined the Freemasons, and became one of the founders of the St. Mark's Lodge. He was a member, too, of the St. Deiniol Lodge, and its Master in 1910. Dr. Burlingham, who is survived by his wife and daughter, was buried at Chester, where his funeral was attended by a representative of the Gladstone family and many people from Hawarden.

The Services.

ROYAL ARMY MEDICAL CORPS (T.).

WESSEX DIVISION.

THE annual dinner of officers of the Wessex Division, R.A.M.C.(T.), was held on May 3rd at the Royal Clarence Hotel, Exeter. Colonel H. J. Mackay, M.D., the new A.D.M.S., Wessex Division, presided. About thirty officers were present, including Major-General Donald, C.B., Colonel Raglan Thomas, K.H.P., Lieutenant-Colonel Davy, Lieutenant-Colonel Elkington, Lieutenant-Colonel Pickard, Lieutenant-Colonel Soltau, Colonel Webb, and Major Duncan, D.S.O. Telegrams of apology were read from Sir Frederick Treves, Sir Launcelot Gubbins, Surgeon-General Macneece, and many others.

After the toast of "The King" had been duly honoured, "The Imperial Forces" was given by Colonel Davy. He said what they wanted was a Minister who, recognizing the pluck in Englishmen, would try and train a large body of Englishmen to serve in His Majesty's Imperial Forces. The Forces at the present time had all the pluck which was possible, considering their training. They were not trained half enough; there were not a sufficient number of men induced or made to join the Forces. Major-General Donald, in reply, said some people said the Territorial Force was dwindling away to nothing. They could not apply that to the Wessex Division, for, according to the last returns, he found that during that month the Division had increased by 35 men. During the last six months the increase had been just short of 900. He hoped the increase would be maintained in spite of the troublous times which were supposed to be in store for the Territorial Force. His aim and that of the staff had always been to make the work of the Division go as pleasantly as possible. He went on to pay a tribute to Colonel Raglan Thomas, and expressed deep regret that he had had to give up his appointment as A.D.M.S.

Major Duncan gave "The Royal Army Medical Corps." The statistics recently published by the Director-General, showing the work which had been done by the regular Army Medical Corps in India, showed results which, he said, were next to marvellous. The death-rate had been lowered by almost half and the ravages of disease greatly reduced. Colonel Elkington, replying, said that, from what he knew of the Wessex Division, he felt sure of it. If the rest of the Force were up to the same standard, the regular army was sure of support in time of war to a much greater extent than had ever been the case before.

Colonel Raglan Thomas proposed the health of "The Chairman," who in reply said it would be his earnest endeavour to carry on the traditions with which Colonel Raglan Thomas had already invested that post. He had read many reports of the inspecting officers, but he could not recollect one in which any disparaging criticism had been made of the efficiency of the units of the R.A.M.C. The returns were in most cases satisfactory, and led them to believe that they had already arrived at a quite creditable state of efficiency in their unit. They had the confidence and esteem of their divisional and brigade commanders. They had also the sympathy and support of the Brigadier-General of the Medical Service and his staff, who he had always found most ready to help in every possible way. It should encourage them to remember that if the Territorial Force were to be mobilized to-morrow the medical service as regards general organization and equipment would be better than that of any other British force that had yet taken the field. They would be grossly wanting in their duty if they allowed that company to separate without expressing that they all felt their keen regret at losing the services of Colonel Raglan Thomas. He had served with distinction, which his Sovereign had recognized in the honour conferred upon him. He had had all the hard work to do. At first the whole of the organization of that division had fallen upon him and he had worked single-handed for some time, and he had done it well. The toast was drunk with musical honours and cheers. Colonel Raglan Thomas returned thanks in a graceful speech. He was glad that although he had to go his staff officer remained. Colonel Mackay took on the duties, he ventured to think, under somewhat more favourable circumstances than he did himself. He was glad to think that those who had been so ably doing the work, with himself at the figure head, were still with Colonel Mackay to help him. He also thanked the officers of the General Hospital, foremost among whom was Lieutenant-Colonel Davy.

Medico-Legal.

ACTION FOR LIBEL AGAINST AN ANTIVACCINATOR.

AT the Yorkshire Spring Assizes at Leeds, on May 9th, Dr. Arthur Drury, of Halifax, brought a successful action for libel against a Mr. George Weir, Honorary Secretary of the Leeds branch of the National Antivaccination League.

The libel consisted in the dispatch to the plaintiff of a certain post card. This first referred to a newspaper controversy in which the plaintiff, the defendant, and other persons had taken part over four years previously, and then, after making sundry untrue and, as described by counsel, disgusting statements about the plaintiff, ended by suggesting that Crippen was a saint compared with the President of the Society of Public Vaccinators (Dr. Drury).

Dr. Drury's counsel said that the action had only been brought after giving the defendant the chance of settling matters by publishing an apology in the *Vaccination Inquirer* and making a payment of ten guineas in aid of the funds of the Halifax Nursing Association. Heavy damages were not sought; all that the plaintiff desired was to obtain protection against attacks of this kind by getting the defendant cast in such damages as would teach him to refrain from a similar course in future.

Mr. Justice Channell, addressing the jury, remarked that vaccination was a subject upon which there were divergent views, and views that were held with confidence on the one side and the other. If defendant thought it was a detestable practice, he had a right to say so, and anything he said in his post card which was merely abusive of vaccination, however erroneous the jury might think it, could not be made the subject of action. At the same time, a person had no right, when commenting on a matter of public interest, to make personal imputations upon the character of the people who had to do with the matter he was commenting upon. To call vaccination murder was an absurd and exaggerated mode of expression. If they found the matter written on the post card defamatory, the question of publication was one of law, and it had been decided over and over again that to write such matter on a post card and send it through the post was publication of that matter.

After a brief retirement, the jury gave a verdict for the plaintiff, with £15 damages, and judgement was entered accordingly, with costs.

Medical News.

THE King will inspect the ambulance corps and nursing divisions of the St. John Ambulance Brigade, which will be under the command of Colonel Sir James Clark, Bart., C.B., late R.A.M.C., the Chief Commissioner, on Saturday, June 22nd, at 3.30 p.m. in Windsor Park. Major-General J. C. Dalton, R.A., Chief Commissioner of the Brigade Overseas, will be in command of representatives of brigade units from the dominions. The inspection will conclude with a display of ambulance work.

THE dinner which some time ago we mentioned as likely to be given at the Mansion House in support of the St. Bartholomew's Hospital appeal is to take place on Wednesday, June 5th.

THE Brussels Medical Graduates' Association will hold an extra biennial dinner at the Trocadero on Wednesday, May 29th, at 7 for 7.30 p.m. Members are invited to bring ladies, and all graduates of the University of Brussels are welcome. Tickets, 5s. (not including wine), may be obtained from the Honorary Secretary, Dr. Arthur Haydon, 23, Henrietta Street, Cavendish Square, W.

THE Glasgow University Club, London, will dine at the Trocadero Restaurant, Piccadilly Circus, on Thursday, June 6th, when Mr. William Lorimer, LL.D., Chancellor's Assessor on the University Court, will take the chair at 7.30 p.m. The annual general meeting of the club will be held at 6.45 p.m. at the same place. Communications should be addressed to the Honorary Secretaries, 30, Seymour Street, London, W.

THE annual meeting of the Society for Training Teachers of the Deaf, and for the Diffusion of the German (Pure Oral) System, will be held at 33, Cavendish Square, W., by permission of Mrs. and Dr. H. E. Symes-Thompson, on Wednesday, May 29th, at 3 p.m. The meeting will be presided over by the chairman of the committee, Mr. B. St. John Ackers.

DURING their visit to Aldershot last week the King and Queen on Saturday afternoon visited the Cambridge Hospital, where they were received by Surgeon-General G. W. Robinson, C.B., Deputy Director of Medical Services, Aldershot Command, Lieutenant-Colonel S. Hickson, R.A.M.C., officer in charge, the medical and surgical staff, and Miss H. W. Reid, the matron. Earlier in the afternoon the Queen had visited the Louise Margaret Hospital, where she was received by Surgeon-General

G. W. Robinson, Major S. F. St. D. Green, R.A.M.C., officer in charge, the medical and surgical staff, and Miss E. M. Beesby, the lady superintendent.

SPEAKING at the annual meeting of the Children's Country Holiday Fund on May 21st, Mr. Austen Chamberlain pointed out that of the total income less than 6 per cent. was absorbed by administration expenses. Over a third of the income was supplied by the parents, who made small weekly payments for weeks beforehand in order to secure the privilege of a fortnight in the country for their children. There were 800,000 children in the elementary schools of London, of whom 480,000 never slept a single night out of London one year after another, and many of them never went out of London for a day. Last year the society provided a fortnight in the country for 45,000 of these children. In reporting its experiences one child said: "I did not see a baby, I mean not to mind it, all the time"; while a boy of 9 wrote: "I do not have to mind any twins; I think them a nuisance." Contributions in aid of the society will be gladly received by the Secretary, 18, Buckingham Street, Strand.

THE annual report for 1911–12 of Dalrymple House, Rickmansworth, shows that of the 35 inebriates admitted during the year only 9 entered under the Act, a method of obtaining treatment which Dr. F. S. D. Hogg, the Medical Superintendent of the Home, regards as much the best for everybody, and especially the patient. Those discharged numbered 48, 5 being persons for whom he considered further residence unnecessary. The average duration of stay was from five to six months, and the plan of allowing patients to leave on parole is praised. The general rule of the establishment is to cut off alcohol directly the patient is admitted (though if a strong desire is expressed for it during the first day or two it is not refused). Alcoholics thus treated recover more rapidly, and there should be no ill results in the way of delirium tremens and alcoholic epilepsy if the patient is kept under close observation and the alcohol replaced for a time by other drugs. But in the case of morphine there is no drug which can be substituted with safety, and gradual reduction is therefore practised. The statistics supplied show that the majority of the 1,026 patients admitted since the foundation of the home belonged to the upper middle classes. Dr. Hogg endeavours to keep in touch with former patients, and supplies figures which suggest that over 40 per cent. of them continue to abstain entirely from alcohol and morphine.

DR. WALTER F. BROWN, Medical Officer of Health, Ayr, has sent us two paragraphs from the *Ayrshire Post*, relating to the suicide of two shoemakers by drinking carbon bisulphide; one took place on Sunday, May 5th, at Ayr, and the other at Troon, on Wednesday, May 8th. The solution is used by shoemakers for dissolving rubber. Dr. Brown, who was called to the first case, tells us that the man had swallowed 1½ oz. He had been left alone on Saturday evening by his wife, who on returning home found him in bed unconscious with a bottle which had contained the bisulphide beside him. Dr. Brown found him unconscious, almost pulseless, the pupils dilated, and the body cold. He had also suffered from severe diarrhoea and vomiting; he died about four hours after he had taken the poison. In the other case, Dr. Mackintosh, who was called in, succeeding in getting the man to swallow an emetic, but the report does not state the interval between the taking of the poison and death. Cases of poisoning by this liquid appear to be rare. It causes disintegration of the red blood corpuscles, with the production of methaemoglobin. Wynter Blyth records a case of attempted suicide in which the dose taken was larger, 2 oz. In this the patient suffered from the symptoms mentioned by Dr. Brown, with the addition of convulsions; evidence of the excretion of carbon bisulphide by the lungs and by the kidneys was obtained; the patient suffered from intense burning of the throat, giddiness, and headache for several days.

A fifth report on "Flies as Carriers of Infection" has been issued by the Local Government Board (Reports to Local Government Board on Public Health and Medical Subjects. New series. No. 66. Price 3d.) It is shorter and of less general interest than the preceding ones, and it deals chiefly with flies other than *Musca domestica*. A few experiments on the range of flight are recorded by Dr. Gordon Hewitt. They differ from the experiments previously carried out by Dr. Copeman, and described in the last report in that they took place in the heart of the City of Ottawa, Canada, and not in the open country. A new method of marking the flies was employed, and it was found that several of them travelled distances over 500 yards within two days. The greatest direct distance was 700 yards. These observations show that flies may travel over considerable distances even in a town. Dr. Hewitt also contributes an article on the bionomics of the smaller house-flies, *Faunia canicularis* and *F. scalaris*, and gives a brief description of the larvae of these flies. They are readily distinguishable from the maggots of *Musca* by their remarkable bristly or feathery appearance. Both these flies, but particularly *F. scalaris*, make a habit of breeding in human excrement. On that account the latter insect is sometimes known as the "latrine fly." Dr. Hewitt refers to cases of myiasis caused by these flies—a subject, however, which is more fully dealt with by Mr. Austen in the third part of the report. Although not uncommon in warmer countries, myiasis is rare in England; yet a certain number of cases have been put on record. The flies concerned comprise about nine or ten species, and include the house-flies, the bluebottle, and the cheese maggot fly. The infection is caused by the larvae, which find their way into the alimentary or urinary tract. Occasionally they are found in other situations, such as the ear and ulcerating surfaces. As a rule, they do no harm, except by causing mental distress. Short accounts of the most interesting cases are given.

A LARGE number of headmasters and mistresses, as well as medical officers, took part in the Conference on Public, Secondary, and Private School Diet organized by the National Food Reform Association, which was held at the Guildhall on Monday, May 13th. Amongst those present were the headmasters of Haileybury and Christ's Hospital, together with representatives from Rugby, Sherborne, Clifton, Manchester Grammar School, Cheltenham College, and St. Paul's Girls' School; whilst an interesting exhibition was arranged in order to show how a greater variety of wholesome and appetizing foods might be introduced into the school menu. The conference was opened by the Lord Mayor, who spoke of the diet at public schools some seventy years ago, when better dietetic arrangements were urgently needed. In his opinion, he continued, the food given to growing children should be simple, well cooked, and varied, and, above all, the hours for meals should be fixed and regular, and sufficiently long to allow the children ample time to consume their food without undue haste. Dr. Clement Dukes, the Honorary Consulting Physician to Rugby School, who read a paper on Diet as a Factor in Efficiency, said that the first and most important thing with regard to the diet of children was that it should be sufficient. The kind of food was of secondary importance, and, whereas adults should leave the table hungry, children should reach a sense of repletion before rising from a meal. A larger quantity of all the essential kinds of food was demanded during youth than at any other time of life; and the most indefensible of all schemes of school feeding was the mediaeval and barbarous arrangement whereby the parents were forced to supplement by means of hampers the recognized inadequacy of the school table. Breakfast, added Dr. Dukes, was the most important and health-giving meal of the day for youth, and no work should ever be imposed upon children without some previous sustenance. Dr. Robert Hutchison, who represented the British Medical Association, declared that there was far more danger in underfeeding than in over-feeding a healthy growing child. The natural appetite, provided it was not debauched by rich foods or by eating between meals, was the best guide, and the only safe rule to remember was that to have enough one must have too much. The food should be well cooked and abundant, and brain work should never be attempted soon after a full meal. Any idea of the influence of food on mental and moral disposition was purely fanciful, though it was said that the actor Kean believed that there was such a relation, and when playing the part of a villain was accustomed to eat beef, whilst putting himself on a course of mutton if he had to take the rôle of a lover. On the other hand, some of the cruellest races in the world had been vegetarians. Neither had the quantity of food consumed any demonstrable effect upon the character, although, perhaps, underfeeding tended to produce peevishness, irritability, and depression, while overfeeding was apt to cause laziness. It was not safe to try to influence morals in school by playing with the diet, for one might so easily do physical harm without effecting any moral good. The diet at school must be designed to produce healthy animals of maximum physical efficiency, whilst intellect and morals must be catered for by some one other than the cook. The disadvantages of a too luxurious diet at school were touched upon by the Rev. H. Dunkin, of Sherborne College, who deplored the modern tendency to indulge in food fads. We seemed, said the speaker, to be in some danger of injuring the health of the rising generation by over-solicitude; and, if that was the case, were doing an injury not only to the children themselves, but to the country we professed to serve.

Letters, Notes, and Answers.

ORIGINAL ARTICLES and LETTERS *forwarded for publication are understood to be offered to the* BRITISH MEDICAL JOURNAL *alone unless the contrary be stated.*

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate with the Office, 429, Strand, W.C., on receipt of proof.

CORRESPONDENTS not answered are requested to look at the Notices to Correspondents of the following week.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, London, W.C.; those concerning business matters, advertisements, non-delivery of the JOURNAL, etc., should be addressed to the Office, 429, Strand, London, W.C.

TELEGRAPHIC ADDRESS.—The telegraphic address of the EDITOR of the BRITISH MEDICAL JOURNAL is *Attiology, London.* The telegraphic address of the BRITISH MEDICAL JOURNAL is *Articulate, London.*

TELEPHONE (National):—
2631, Gerrard, EDITOR, BRITISH MEDICAL JOURNAL.
2630, Gerrard, BRITISH MEDICAL ASSOCIATION.
2634, Gerrard, MEDICAL SECRETARY.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

A MEDICAL man practising in the country desires to hear of a reliable local anaesthetic for dental cases to be used not by injection.

CENTRAL INQUIRER would be pleased to know the formula of a larvicide used in Panama, and called by a name somewhat like "Panama Mixture."

L. H. asks for what period it is usual or safe to continue the administration of arsenic in a child, aged 6 years, for psoriasis, and what dose. The condition has improved greatly, but is not quite well, and remains obstinate.

DR. WILLIAM ALLEN, 20, Sandyford Place, Charing Cross, Glasgow, desires to hear from practitioners who have had experience of the results of ileo-colostomy for ulcerative or mucous colitis, in particular as to the condition six months after the operation.

PSYCHO-ANALYSIS would be very grateful for any information *re* the treatment of stammering on psycho-analytical lines, as suggested by Professor Freud of Vienna, and to know whether there is any one in this country working and practising on those lines whose experience might be available, or to hear of any one who has had experience of Professor Freud's method.

HERPES PRECEDING MENSTRUATION.

C. R. I. asks advice in the following case: An unmarried woman aged 30, who has been troubled ever since puberty with a herpetiform eruption on the face, which appears quite regularly a few days before each period. There is great local pain before the eruption appears. At the period there is more or less severe headache, but sometimes this is prostrating and accompanied with biliousness. I have been able to prevent the eruption with a paint of aconite and chloroform, but the headaches are more severe when the eruption is thus prevented. There is no pelvic pain at the period. Arsenic, iron, and strychnine have had a long trial.

DEATH AFTER SALVARSAN.

DRS. STOPFORD-TAYLOR AND R. W. MACKENNA (Liverpool) write: In your issue of May 18th you publish a note from Dr. W. Campbell M'Donnell on a death after salvarsan. It is unfortunate that the report is lacking in several most important details—for example: (1) What was the condition of the urine before the first injection? (2) Had all the arsenic been eliminated from the system before the second injection was given? (3) Did the urine contain any albumen after the first injection was given? (4) What were the *post-mortem* findings? If these facts were available it would be possible to arrive at some sort of conclusion as to how far this unfortunate fatality was actually due to salvarsan. Without these facts we fear that the opponents of salvarsan will seize upon this case as a weapon to use against a remedy which, properly employed, is no more dangerous than chloroform, and equally beneficent in its effects.

INCOME TAX.

H. J. F. B. inquires whether he may, in making his income return, deduct the cost of a locumtenent engaged for a fortnight during his holiday.

*** The outgoing in question is one that is frequently disallowed by surveyors of taxes, on the ground that it is a payment incurred not in carrying on the profession, but in order to get some one else to carry it on. This argument is fallacious, and is not, we believe, applied in the case of other professions and businesses where the expenses must equally include provision for the carrying on of the work while the principal is away. It is absurd to suppose that a full twelve months' fees can be earned year by year by an individual practitioner unless he takes reasonable holidays and makes some provision for attendance on his patients while he is away.

NOVICE holds certain appointments and inquires whether he may deduct the cost of travelling to the place of performance of the duties.

*** Profits of appointments are, strictly, assessable under Schedule E of the Income Tax, and if so assessed are not subject to any allowance for travelling expenses except such as are incurred while performing the duties of the office. If our correspondent is in general practice, with private patients, he may, however, apply to the surveyor of taxes to have his receipts from appointments treated as part of the general receipts of the practice.

REBATE OF LICENCE DUTY ON MOTOR CARS.

C. G. C. inquires whether in order to be entitled to relief of one-half the licence duty he is obliged to refrain from use of his car for such purposes as a run in the country with companions.

*** It appears from our correspondent's letter that he is in the habit of carrying passengers, and that he has been warned that the local licensing authorities may prosecute him if he does not desist from doing so or pay the full licence duty. The stipulation in the Act is that the car should be "kept for the purpose of the profession." These words are usually taken as not excluding occasional and incidental use for non-professional purposes, but there is no doubt that a court of law would hold that the systematic use of the car for other than professional purposes would involve payment of the full duty.

ANSWERS.

SUFFOCATION.

H. B. C. writes, in reply to "A Witness": I once had an alarming spasm of the glottis. I certainly did not clutch at my throat, though given to amateur theatricals. As far as I remember, I held on to the dressing table in front of an open window.

LETTERS, NOTES, ETC.

GENERAL MEDICAL COUNCIL, NOVEMBER, 1911.

DR. ARTHUR GEORGE HAYDON (Honorary Secretary, Brussels Medical Graduates' Association) wishes to thank all those ladies and gentlemen who kindly voted for him at the recent election of Direct Representatives, especially those in favour of the registration of foreign degrees. He hopes for their support on a future occasion.

EFFECT OF SCOPOLAMINE AND MORPHINE IN LABOUR ON THE CHILD.

DR. G. A. WYON (Bow, E.) writes as to the use of scopolamine and morphine in labour: Of the six cases in which I have tried it, four have given me (and the patient) great satisfaction. In the fifth case the child never breathed, though the heart was beating feebly at birth, which was effected by forceps ten hours after a single administration of the drugs. In the sixth case the child was a little blue at birth, but soon breathed well, and was then put aside. Fifteen minutes later, thinking it was unusually quiet, I uncovered it and found it very blue and not breathing. It came round after prolonged and vigorous spanking, which seemed more effectual than more orthodox methods. There was no fire in the room in this case. I am inclined to attribute the condition in this last case to the drugs, though Dr. Massey-Miles's case in the BRITISH MEDICAL JOURNAL for May 18th makes one question it. One would like to know if such an event as in my sixth case is common where no anaesthetics have been used.

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE BRITISH MEDICAL JOURNAL.

	£	s.	d.
Eight lines and under	0	4	0
Each additional line	0	0	6
A whole column	2	13	4
A page	8	0	0

An average line contains six words.

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NOTE.—It is against the rules of the Post Office to receive *postes restante* letters addressed either in initials or numbers.